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# TITLE V AIR QUALITY OPERATING PERMIT

Permit Number: V95-006
Revision Number: 3.0.0.0

Original Issue Date: June 30, 2002
Renewal Date: XXXXXXXX
Expiration Date: November 30, 2021

Permittee Name: Arizona Public Service
Mailing Address: P.O. Box 53933
Business Name: West Phoenix Power Plant
Facility Address: 4606 West Hadley Street, Phoenix, AZ 85043

Equipment and Processes Covered: The APS West Phoenix Power Plant is a Title V power generation plant with $NO_x$, CO, and $PM_{10}$ emissions above the Title V permitting threshold.

This Permit is issued in accordance with Maricopa County Air Pollution Control Regulations, Rule 200, §301, and Arizona Revised Statutes, §49-404c and §49-480. The attached Permit Conditions are incorporated into and form an integral part of this Permit. The Permit is issued to provide regulators, site operators or owners, and members of the public, a clear picture of what the Permit holder is required to do to meet applicable requirements. As the Permit holder, you are expected to review this Permit, become familiar with its provisions and conditions and to operate in conformance with them. This Permit is an enforceable document. Failure to conform to the emission limits and any other condition contained in the Permit is a violation of law and will form the basis of enforcement action by the department which may include civil or criminal sanctions.

If the MCAQD Control Officer determines that additional monitoring, sampling, modeling and/or control of emissions from the facility may reasonably be needed to provide for the continued protection of public health, safety and/or welfare, the MCAQD Control Officer will amend the provisions of this Permit. This Permit may be subject to suspension or revocation for cause including nonpayment of fees, noncompliance with Arizona State Statutes, Maricopa County Air Quality Regulations, or the attached Permit Conditions, or if the MCAQD Control Officer determines that significant misrepresentation exists in the application and supporting documentation filed to obtain or modify this Permit.

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Philip A. McNeely, R.G.
Maricopa County Air Quality Control Officer

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*Any cited regulatory paragraphs or section numbers refer to the version of the rules and regulations that were in effect on the first date of public notice of the applicable Permit Condition unless specified otherwise. However, in the event the rules and regulations are amended during the term of this Permit, the amended rules and regulations shall apply to this Permit. Whenever the term, Control Officer, is used in this Permit it shall be interpreted to mean, Control Officer or designated representative. Where the term "Rule" appears, it shall be construed to mean "Maricopa County Air Pollution Control Regulations" unless otherwise noted.*

## SPECIFIC CONDITIONS

Definitions: For the purpose of these conditions, the following definitions shall apply:

1) "TPY" shall be defined as "tons emitted in any rolling 12-month period, with a new 12-month period beginning on the first day of each calendar month."

2) The "startup period" for the combined cycle units shall be defined as the time period beginning when the combined cycle unit is initially started and combustion is indicated until operation achieves normal operating conditions.

3) "CC3 Normal Operation" shall be defined as the time period when the combined cycle is operated at a load greater than 60% of the nameplate capacity and the SCR catalyst reaches a temperature greater than 520 °F.

4) "CC4 Normal Operation" shall be defined as the time period when the combined cycle reaches "Premix Operation", and the inlet temperature of the oxidation catalyst reaches a temperature greater than 600 °F. Premix Operation is the turbine operating mode representing advanced dry low $NO_x$ combustion with a lean premixed flame condition.

5) "CC5 Normal Operation" shall be defined as the time period when the combined cycle reaches "Stage C" combustion and the inlet temperature of the SCR reaches a temperature greater than 520°F. Stage C is the turbine operating mode representing advanced dry low $NO_x$ combustion with a lean premixed flame condition.

6) "O&M Plan" shall be defined as the Operations and Maintenance Plan most recently approved either in writing by the Control Officer or by County Rule.

7) "Shutdown" is defined as the period of time when the units are reduced from normal operating conditions and ends when all combustion has ceased or normal operating conditions have been reestablished.

8) "Natural Gas" shall be defined as a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions and contains 20.0 grains or less of total sulfur per 100 standard cubic feet.

9) "Pipeline Natural Gas" means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions, and which is provided by a supplier through a pipeline. Pipeline Natural Gas contains 0.5 grains or less of total sulfur per 100 standard cubic feet. Additionally, Pipeline Natural Gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 Btu per standard cubic foot.

10) "ppmvdc" means parts per million by volume dry corrected to 15% oxygen.

## 1. ALLOWABLE EMISSIONS:

a. ALLOWABLE EMISSIONS FOR FACILITY:

i. Particulate matter limits:

The Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from any fuel burning equipment or stationary rotating machinery having a heat input rate of 4200 million Btu per hour or less in excess of the amounts calculated by the following equation:

$E = 1.02\ Q^{0.769}$ where:

E= the maximum allowable particulate emissions rate in pounds-mass per hour.
Q= the heat output in million Btu per hour.

[SIP Rule 31H]

ii. Annual Emission Limits for CC3, CC4, CC5, the cooling towers for CC4 and CC5, and the Clayton Boiler.

[County Rule 241 §301.1][County Rule 240 §305 and §308] [locally enforceable only]

The actual tons per year of emissions, based on a 365 day rolling average, from units CC3, CC4, CC5, the cooling towers for CC4 and CC5, and the Clayton Boiler shall not exceed the allowable emissions listed in Table 1. CC3, CC4, and CC5 may operate in any operational condition as long as the annual limits in Table 1 are not exceeded. For comparison to the annual limits in Table 1, the monitoring and calculation procedures of Part 75 (including missing data substitution) shall be used.

[40 CFR Part 75]

**Table 1**
**Allowable Combined Emissions for CC3, CC4, CC5,the CC4 and CC5 Cooling Towers, and the Clayton Boiler Emission Units (tpy)**

| Parameter | $NO_x$ | CO | $SO_2$ | VOC | $PM_{10}$ |
|---|---|---|---|---|---|
| Annual Emission Limits | 405.1 | 184.2 | 16.3 | 56.1 | 108.3 |

iii. Short-term Emission Limits for CC3, CC4, and CC5.

[County Rule 240 §305 and §308] [County Rule 241 §301] [County Rule 360] [County Rule 500 §300] [County Rule 510 § 300] [locally enforceable only]

[SIP Rule 32F]

1) The maximum short-term emissions from CC3, CC4, and CC5 during periods of startup and shutdown shall not exceed the allowable emissions listed in Table 2a.

**Table 2a**
**Short-term Allowable Emissions During Startup/Shutdown (lb/hr)**

| Unit # | $NO_x$ | CO | VOC | $PM_{10}$ | $SO_2$ |
|---|---|---|---|---|---|
| Averaging Interval | 1-hour | 1-hour | 1-hour | 1-hour | 1-hour |
| CC3 | 273.7 | 440 | 12.4 | 5.0 | 44.14 |
| CC4 | 87.8 | 435 | 15 | 5.0 | 0.424 |
| CC5 (per turbine) | 169 | 870[1] | 29 | 8.0 | 1.002 |

Note 1: CC5 CO will be calculated as a 3 hour rolling average. CC5 is not subject to this limit if an abnormal shutdown (including a test start) occurs during the first three hours of startup, but the emissions will go towards the annual emissions limits.

2) The maximum short-term emissions from CC3, CC4, and CC5 during periods other than startup/shutdown shall not exceed the allowable emissions listed in Table 2b.

**Table 2b**
**Maximum Short-term Allowable Emissions During Periods Other Than Startup/Shutdown (lb/hr)**

| Unit # | $NO_x$ | CO | VOC | $PM_{10}$ | $SO_2$ |
|---|---|---|---|---|---|
| Averaging Interval | 3-hour | 3-hour | 3-hour | 3-hour | 3-hour |
| CC3 | 34.3 | 25.08 | 5.6 | 6.9 | 0.63 |
| CC4 | 34.2 | B/L | B/L | B/L | N/A |
| CC5 (per turbine) | 24.3 | B/L | B/L | B/L | N/A |

Note: the designation "B/L" refers to contaminants for which the source is required to meet air flow, heat rate, or fuel quality dependent BACT or LAER emission rates, as shown in the next section. The short-term allowable emission rate for these pollutants shall be the BACT/LAER emission rate.

[40 CFR §60.44b(l)(1), §60.332a(1), a(2) and a(3), §60.332(b), §60.333]

3) The maximum short-term emissions of ammonia from CC3 and CC5 shall be limited to 10 ppmvdc (24 consecutive hour rolling average).

4) The maximum short-term $NO_x$ emissions from the duct burner on CC5 shall be limited to 0.20 lb/MMBtu at all times.

[40 CFR 60.46b(a)]

b. LAER AND BACT EMISSION LIMITS FOR CC4 AND CC5.

i. The emissions for $PM_{10}$, VOC, and CO shall be calculated on a 3-hour rolling average, excluding periods of startup, shutdown, malfunction, and equipment shakedown prior to commercial operations. Maximum short-term emissions are estimated at 100% capacity.

ii. The $PM_{10}$ and VOC emissions from CC4 and CC5 emission units shall not exceed the

allowable emissions listed in Table 3. The allowable limit shall be the greater of the lb/hr or lb/MMBtu emission rate.

iii. The CO emissions from CC4 and CC5 emission units during normal operations shall not exceed 6 ppmvd at 15% $O_2$, nor shall CO emissions from CC4 exceed 12.5 lb/hr, nor shall CO emissions from each turbine of CC5 exceed 26.4 lb/hr.

**Table 3**
**BACT/LAER Allowable Emissions (3-hour rolling average)**

| Unit # | $PM_{10}$ LAER Limit | VOC LAER Limit |
|---|---|---|
| CC5 – Normal Operations (per turbine) | 8.0 lb/hr or 0.00443 lb/MMBtu | 3.29 lb/hr or 0.00182 lb/MMBtu |
| CC5 – Normal Operations and Duct Burner (per turbine) | 8.0 + 2.675 lb/hr or 0.00514 lb/MMBtu | 3.29 + 1.88 lb/hr or 0.00249 lb/MMBtu |
| CC5 – Power Augmentation and Duct Burner (per turbine) | 8.0 + 2.675 lb/hr or 0.00486 lb/MMBtu | 3.50 + 1.88 lb/hr or 0.00245 lb/MMBtu |
| CC4 - Normal Operations | 5.0 lb/hr or 0.00529 lb/MMBtu | 2.27 lb/hr or 0.0024 lb/MMBtu, reported as methane |

c. EMISSION LIMITS FOR THE CLAYTON BOILER:
The emissions from the Clayton boiler shall not exceed:
$NO_x$ = 13 ppmvdc at 3% $O_2$.
CO = 50 ppmvdc at 3% $O_2$

[County Rule 241 §301]

d. SHORT –TERM EMISSION LIMITS NORMAL OPERATION FOR CT1, CT2, CC1 AND CC2

i. The maximum short-term $NO_x$ emissions from CC1 and CC2 during periods of normal operation shall not exceed 155 ppmvdc calculated as nitrogen dioxide when burning gaseous fossil fuel.

[County Rule 322 §304.1] [locally enforceable only]

ii. The maximum short-term CO emissions from CT1, CT2, CC1 and CC2 during periods of normal operation shall not exceed 400 ppmv during steady state compliance source testing. This test result, using EPA Reference Method 10, shall be based upon the arithmetic mean of the results of three test runs. Each test run shall have a minimum sample time of one hour. The CO concentration shall be measured dry and corrected to 3% oxygen for electric utility steam generating units and cogeneration steam generating units. The CO concentration shall be measured dry and corrected to 15% oxygen for stationary gas turbines.

[County Rule 322 §305] [locally enforceable only]

e. OFFSITE SULFUR DIOXIDE LIMIT:
The Permittee shall not emit into the ambient air any sulfur dioxide in such manner and amounts as to result in ground level concentrations at any place beyond the premises on which the source is located exceeding those limits shown in the following table:

**Table 4: Sulfur Dioxide Limits**

| Concentration of Sulfur Dioxide (ug/cubic m) | Averaging Time (hours) |
|---|---|
| 850 | 1 |
| 250 | 24 |
| 120 | 72 |

[SIP Rule 32 F]

f. OPACITY LIMITS:

1) The Permittee shall not discharge into the ambient air from any single source of emissions any air contaminant other than uncombined water, in excess of 20 percent opacity.

[County Rule 323 §302] [locally enforceable only]

2) Except as otherwise provided in Regulation I, Rule 4, Exceptions, the opacity of any plume or effluent from any source of emissions, other than uncombined water, shall not be greater than 40 percent opacity as determined by Reference Method 9 in the Arizona Testing Manual.

[SIP Rule 30]

3) Opacity Determination: For sources with no source-specific opacity requirements, the Permittee shall not discharge into the ambient air from any single source of emissions any air contaminant, other than uncombined water, in excess of 20 percent opacity for a period aggregating more than three minutes in any 60-minute period. Opacity shall be determined by observations of visible emissions conducted in accordance with EPA Reference Method 9 as modified by EPA Reference Method 203B.

[County Rule 300 §§102, 301, and 501] [locally enforceable only]

4) The Permittee shall monthly conduct a facility walk-through and observe visible emissions from each Combustion Turbine and Auxiliary Boiler. The Permittee shall log the visual observations, including the date and time when that reading was taken, results of the reading, name of the person who took the reading and any other related information.

[County Rule323 §501.1][County Rule 210 §302.1(c)(1)] [locally enforceable only]

5) If visible emissions are observed from any device capable of emitting any air contaminant other than condensed water containing no more than analytical trace amounts of other chemical elements or compounds and the facility has never had an opacity violation in the 12 months preceding the observation; the Permittee shall obtain an opacity reading conducted in accordance with EPA Reference Method 9 by a certified visible emissions (VE) reader. This reading shall be taken within 3 days of the observance of visible emissions and taken weekly thereafter during each week that the unit is in operation until there are no visible emissions. If the problem is corrected before three days has passed, and no emissions are visible, the Permittee shall not be required to conduct the certified reading. The Permittee shall log the visual observations, including the date and time when that reading was taken, results of the reading, name of the person who took the reading and any other related information. If an opacity violation has occurred at the facility in the 12 months preceding the observation of visible emissions, the required EPA Reference Method by a certified visible emissions (VE) reader shall be taken within 24 hours of the observation of visible emissions.

[County Rule 210 §302.1(c)(1)] [locally enforceable only]

6) The Permittee shall monitor for compliance with the particulate matter emissions limits of the permit by taking a visual emission observation of the stack emissions from each Combustion Turbine and Auxiliary Boiler during each week of operation that the equipment was used more than 10 hours. If emissions are visible, the Permittee shall obtain an opacity reading conducted in accordance with 40 CFR Part 60 Appendix A, Method 9 by a certified reader. This reading shall be taken within 3 operating days of the visible emission and taken thereafter weekly for each week when operations occur until there are no visible emissions. If the condition causing the visible emissions is eliminated before three days have passed, and no emissions are visible, the Permittee shall not be required to conduct the certified reading. If the visible emissions are present, the Control Officer may require emissions testing by other approved Reference Methods such as 40 CFR 60 Appendix A Method 5 to demonstrate compliance with the particulate matter emission limits of these Permit Conditions.

For purposes of these Permit Conditions, a certified visible emissions reader shall mean an individual who, at the time the reading is taken, is certified according to the County Rule Appendix C, Section 3.4.

[County Rule 210 §302.1.c(2)] [locally enforceable only]

## 2. FACILITY-WIDE REQUIREMENTS:

a. FUEL REQUIREMENTS:

The Permittee shall combust only Pipeline Natural Gas in all combustion turbines, duct burners, and the Clayton boiler.

[40 CFR 60.331(u)][40 CFR 72.2]

i. Pipeline Natural Gas Sulfur Content:
The Permittee shall monitor for compliance with the sulfur dioxide limits of this permit by obtaining and recording the sulfur content of the natural gas used in the Combined Cycle Units, Combustion Turbines and the Clayton Boiler as follows:

1) The Permittee shall monitor sulfur content of the natural gas at least once every calendar year, consistent with the requirements of 40 CFR Part 75, Appendix D. Section 2.3.1.4.

2) If at any time a fuel sulfur analysis exceeds the fuel sulfur limit of Pipeline Natural Gas, the Permittee shall notify the Control Officer within one week of the analysis and shall follow the procedures in 40 CFR Part 75, Appendix D. Section 2.3.1.4 for additional monitoring.

3) If there is a change in fuel supplier, the Control Officer shall be immediately notified and the Permittee shall document that the natural gas meets the requirements of this permit with a purchase contract, tariff sheet, or by pipeline transportation contract. If one of these documents cannot be produced, the Permittee shall document the sulfur content by testing within 60 days of such change in fuel supplier in accordance with the requirements of 40 CFR Part 75 Appendix D.

[County Rule 210 §302.1.c] [locally enforceable only]
[40 CFR 60.334(h)(3)(2) and§335 (b)(10)] [40 CFR 75 Appendix D, §2.3.1.4]

b. The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations, or premises under his control in such quantities or concentrations as to cause air pollution.

[SIP Rule 32.A]

[County Rule 320 §300] [locally enforceable only]

c. Materials including, but not limited to solvents or other volatile compounds, paints, acids, alkalies, pesticides, fertilizer and manure shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices or equipment shall be mandatory.

[SIP Rule 32.C]
[County Rule 320 §302] [locally enforceable only]

d. Where a stack, vent or other outlet is at such a level that air contaminants are discharged to adjoining property, the Control Officer may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet to a degree that will adequately dilute, reduce or eliminate the discharge of air contaminants to adjoining property.

[SIP Rule 32.D]
[County Rule 320 §303] [locally enforceable only]

e. ODORS:
If any complaints of odors detected off-site are received by the County or APS, the Permittee shall maintain an odor log as follows: The log shall contain a description of the complaint, date and time that the complaint was received, and if given, name and/or phone number of the complainant. The logbook shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective actions that were taken.

[SIP Rule 32][County Rules 320 and 210 §302.1]

## 3. COMBUSTION EQUIPMENT:

a. OPERATIONAL REQUIREMENTS:

i. Combustion Turbines:
The Permittee shall use operational practices for combustion turbines (except for turbines CC3, CC4, and CC5) that ensure good combustion control. For purposes of this condition, "Good combustion control for combustion turbines shall mean that the temperature spread across the combustion burners during steady state operations is no greater than 100 °F." If a valid temperature spread of greater than 100 °F is observed across the burners, corrective action shall be taken within three hours to either (1) reduce the output of the units until the spread is less than 100 °F or (2) shutdown the unit until the problem causing the temperature imbalance is corrected. The temperature spread across the combustion burners during startup and shut down conditions shall not be subject to the maximum 100°F condition.

[County Rule 210§302.1 (b)]

ii. CC5 Auxiliary Boiler (Clayton):
The Permittee shall have established initial optimal baseline concentrations for $NO_x$ and CO utilizing the initial design burner specifications or manufacturer's recommendations to ensure good combustion practices. Tune the unit in accordance with good combustion practices or a manufacturer's procedure, if applicable, and as required by Rule 323. Tuning the unit may include the following but only as required by County Rule 323:

1) Clean and replace any components of the burner as necessary to minimize emissions of $NO_x$ and CO.

2) Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly.

3) Inspect flame pattern and make adjustments as necessary to optimize the flame pattern. Measure the $NO_x$ and the CO concentration of the effluent stream after each adjustment was made with a handheld portable monitor to ensure optimal baseline concentrations are maintained.

4) Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly.

5) Measure the $NO_x$ and the CO concentration of the effluent stream after each adjustment was made with a handheld portable monitor to ensure optimal baseline concentrations are maintained.

Note: Due to the design of the boiler and the ultra-low emissions burner system, combustion chamber inspection, burner inspection, and inspection of flame pattern cannot be completed as per County Rule 323 and do not apply.

[County Rule 323§304.1.a][locally enforceable only]

b. MONITORING AND RECORDKEEPING:

i. Combustion Turbines and Auxiliary Boilers:

1) For CC3, CC4, and CC5, the Permittee shall hourly monitor and record the hours of operation, operating mode (start-up, or normal), the exhaust temperature prior to entering the Selective Catalytic Reduction System, the amount of natural gas combusted in each of the turbines and each of the Duct Burners, and the electrical energy output of each turbine. The Permittee shall monthly calculate the rolling twelve-month average of total hours of operation in each mode for each turbine.

For CC1, CC2, CT1, CT2, and the Auxiliary Boiler, the Permittee shall hourly monitor and record the hours of operation, the amount of natural gas combusted in each turbine and the boiler, and the electrical energy output of each turbine.
[County Rule 210 §302. 1(c) (1)][County Rule 323 §501.1] [locally enforceable only]

2) The Permittee shall record the date that the tuning procedure was performed on the CC5 auxiliary boiler and at a minimum: stack gas temperature, flame conditions, nature of the adjustment and results of the nitrogen oxide and carbon monoxide concentrations obtained by using a handheld monitor after each adjustment.

[County Rule 323 §501.4][locally enforceable only]

ii. Combustion Monitors:

To monitor for good combustion the Permittee shall install and maintain combustion monitors on Combustion Turbines. The Permittee shall record temperature spread across the combustion burners for each Combustion Turbine except CC3, CC4, CC5. The Permittee shall keep record of any corrective actions taken in a case the temperature spread was greater than 100 °F during steady state operations. The temperature spread across the combustion burners during startup and shut down conditions shall not be subject to the maximum 100°F condition.

[County Rule 210 §302.1][County Rule 322 §301.2] [locally enforceable only]

iii. Auxiliary Boiler:

The Permittee shall keep the following records and data on site at all times in a consistent and complete manner, and they shall be made available to the Control Officer or his/her designee upon request. Copies of reports, logs, and supporting documentation required by the Control Officer shall be retained for at least 5 years. Records and information required by this rule shall also be retained for at least 5 years.

1) Type of fuel used, amount of fuel used, amount of sulfur in the fuel if using liquid fuel, and the days and hours of operation.

2) Date that the tuning procedure was performed on each particular unit and at a minimum: stack gas temperature, flame conditions, nature of the adjustment and results of the nitrogen oxide and carbon monoxide concentrations obtained by using a handheld monitor after each adjustment.

[County Rule 323 §501][locally enforceable only]

c. TESTING:

i. The Permittee shall conduct performance tests on the following equipment to determine compliance with these emission limits of Permit Condition 1 as detailed in Tables 5a and 5b. The testing deadlines in Table 5a may be modified by the Control Officer for good cause, but in no case shall the testing deadline, including test report submittal, extend beyond 180 days after the specified deadline.

[County Rule 200 §309][County Rule 270 §401][SIP Rule 27 §A] [40 CFR §60.8(a)]

**Table 5a**
**Stack Performance Test Requirements for the Combined Cycle Units 3, 4, and 5**

| Pollutant | Units to be Tested | Test Method | Testing Frequency |
|---|---|---|---|
| $NO_X$ | CC3, CC4, and CC5[1] | RATA testing in accordance with 40 CFR Part 75, Appendix B and 40 CFR Part 60, Appendix F | RATA testing in accordance with 40 CFR Part 75, Appendix B and 40 CFR Part 60, Appendix F |
| CO | CC3, CC4, and CC5[1] | RATA testing in accordance with 40 CFR Part 60, Appendix F | RATA testing in accordance with 40 CFR Part 60, Appendix F |
| $PM_{10}$ | CC3, CC4, and CC5[1] | EPA Test Methods 201A[2] and 202 | Annually, between 9 and 15 months from the date of the last $PM_{10}$ test. |
| VOC | CC3, CC4, and CC5[1] | EPA Test Methods 25A and 18 | Annually, between 9 and 15 months from the date of the last VOC test. |
| Ammonia | CC3 and CC5[1] | EPA Conditional Test Method CTM-027 or Bay Area Air Quality Management District Source Test Procedure ST-1B or EPA Method 320 | Tests shall be performed every three years (within 34 to 38 months of the previous test). In addition, an ammonia test shall occur within 90 days following complete SCR system catalyst replacement. |

[1] Testing of Combined Cycle 5 (CC5) refers to individual testing of Combustion Turbines CC5A and CC5B.

[2] For $PM_{10}$ testing, EPA Test Method 5 may be substituted for EPA Test Method 201A if the Permittee agrees to assume that all particulates are $PM_{10}$.

[County Rule 200 §309] [County Rule 210 §302] [County Rule 270] [County Rule 210 §302.1c]

[40 CFR 60.8] [40 CFR §60.50Da] [40 CFR §60.335] [40 CFR Part 60 Appendix F] [40 CFR Part 75 Appendix B]

1) During each performance test, the Permittee shall record the combined cycle unit generator output, fuel flow rate, SCR inlet temperature, CO catalyst temperature, and ammonia injection rate if the data are available. These and any additional operational parameters shall be identified in the pretest protocol, recorded during testing, and included in the test results report.

2) If the catalyst bed in the Selective Catalytic Reduction system is replaced in its entirety at any time, the Permittee shall notify the Department in writing with two weeks of the replacement. The affected stack(s) shall be tested for ammonia within 90 days of installation of the new catalyst, and every five years thereafter. The 90-day deadline may be extended by the Control Officer for good cause, such as the fact that the unit was not operating during the 90-day period.

[County Rule 200 §309][County Rule 270 §301.1][SIP Rule 27 §B]

3) 40 CFR Subpart Db Performance Testing for Duct Burners in CC5:
The Permittee satisfied the initial testing requirements of 40 CFR 60, Subparts A and Db following issuance of the previous permit. If the Control Officer requires additional testing under 40 CFR 60, Subparts A and Db, the applicable procedures described in §60.46b shall be followed.

[40 CFR §60.46b]

4) 40 CFR Subpart GG Performance Testing for Combustion Turbines CC4 and CC5:
The Permittee satisfied the initial test requirements of 40 CFR 60 Subparts A and GG following issuance of the previous permit. If the Control Officer requires additional testing under 40 CFR 60, Subparts A and GG, the applicable procedures described in §60.335(a) and (b) with the alternatives provided in §60.335(c) shall be followed.

[40 CFR §60.335]

5) Potential Testing Requirements For Combined Cycle 1, 2, And Combustion Turbine 1 And 2 Units:
If any of the operational hours in Table 5b are exceeded, the Permittee shall conduct a performance test on each affected unit within 180 days after the rolling twelve month total is exceeded. The performance test shall be specific to the compound in Table 5b where the hours were exceeded. $NO_x$ testing shall be conducted in accordance with EPA Test Method 7E. CO testing shall be conducted in accordance with EPA Test Method 10. No more than one performance test shall be required per calendar year for each affected unit.

[County Rule 270 §402][SIP Rule 27 §B]

**Table 5b**
**Threshold Operating Hours for Testing of CC1, CC2, CT1, and CT1**

| Unit | Required Operational Hours to trigger $NO_x$ Testing | Required Operational Hours to trigger CO Testing |
|---|---|---|
| Combined Cycle 1 | 808 | 3150 |
| Combined Cycle 2 | 808 | 3150 |
| Combustion Turbine 1 | 795 | 3125 |
| Combustion Turbine 2 | 795 | 3125 |

ii. Testing Criteria:
Performance tests shall be conducted and data reduced in accordance with the test methods and procedures specified in this permit condition unless otherwise specified by the Control Officer and/or Administrator. The Control Officer and/or Administrator may specify or approve minor changes in methodology to a reference method, approve the use of an equivalent test method, approve the use of an alternative method that has been determined to be acceptable for demonstrating compliance, or waive the requirement for performance tests because the Permittee has demonstrated by other means that the source is in compliance with the standard. For NSPS facilities, only EPA has the authority to waive initial testing requirements.

[County Rule 270 §402][SIP Rule 27 §B] [40 CFR §60.8(b)]

iii. Additional Test Methods:
Sampling sites and velocity traverse points shall be selected in accordance with EPA Test Method 1or 1A. The gas volumetric flow rate shall be measured in accordance with EPA Test Method 2, 2A, 2C, 2D, 2F, 2G or 19. The dry molecular weight shall be determined in accordance with EPA Test Method 3, 3A or 3B. The stack gas moisture shall be determined in accordance with EPA Test Method 4. These methods must be performed, as applicable, during each test run.

[County Rule 270 §301.1][SIP Rule 27 §B]

iv. Operating Conditions:
Performance tests shall be conducted under representative operating conditions and all equipment shall be operated during testing in accordance with the most recently approved O&M Plan or according to its operations manual if no O&M Plan is required. The Permittee shall make available to the Control Officer any records necessary to determine appropriate conditions for performance tests. Operations during periods of startup, shutdown, and equipment malfunction shall not constitute representative conditions for performance tests unless otherwise specified in the applicable standard or permit conditions.

[County Rule 270 §403] [40 CFR §60.8(c)]

v. Combined Cycle Systems:
The Permittee shall conduct the performance tests on each combined cycle system when operating either at full load available on the day of testing or at an alternative load level established and approved as part of the test protocol. Full load available on the day of testing includes operation of the combined cycle system with duct burners operating and any other means of increasing generator output (evaporative coolers, chillers, power augmentation, etc.) unless atmospheric conditions preclude their use. RATA tests shall be conducted at one of the two most frequently used load levels as determined under 40 CFR Part 75, Appendix A, Section 6.5.2.1(d).

[County Rule 210 §302][County Rule 270][40 CFR Part 75 Appendix A]

vi. Monitoring Requirements:
The Permittee shall record all process and control equipment information that are necessary to document operating conditions during the test and explain why the conditions represent normal operation. Operational parameters shall be monitored and recorded at least once every 30 minutes during each of the required test runs and documented in the test report. The operational parameters monitored shall be capable of indicating that the equipment is operating within the permitted limits, both during and after the performance tests.

[County Rule 270 §301.1][SIP Rule 27 §B]

1) Combined Cycle Systems:

a) The Permittee shall record the combustion turbine generator output, HRSG

steam production rates, steam turbine generator output, $NO_x$ concentration, CO concentration, SCR inlet $NO_x$ concentration, combustion turbine fuel flow rate, duct burner fuel flow rate, SCR inlet temperature and ammonia injection rate if the data are available during the performance test.

[County Rule 210 §302.1][County Rule 210 §302][County Rule 270]

b) The Permittee shall record and report with the final test report the CO emission data collected by the CO CEMS during the VOC performance test.

[County Rule 270 §403][40 CFR §60.8(c)][40 CFR §64.4(c)]

vii. Test Protocol Submittal:

The Permittee shall submit a separate test protocol for each performance test to the Department for review and approval at least 30 days prior to each performance test. The test protocol shall be prepared in accordance with the most recent version of the Department's "Air Quality Performance Test Guidelines for Compliance Determination in Maricopa County." A completed copy of the Department's "Test Protocol Submittal Form" shall accompany each test protocol.

[County Rule 270 §301.1][SIP Rule 27 §B] [40 CFR §60.8(d)]

viii. Notice of Testing:

The Permittee shall notify the Department in writing at least two weeks in advance of the actual date and time of each performance test so that the Department may have a representative attend.

[County Rule 270 §404] [40 CFR §60.8(d)]

ix. Testing Facilities Required:

The Permittee shall install any and all sample ports or platforms necessary to conduct the performance tests, provide safe access to any platforms and provide the necessary utilities for testing equipment.

[County Rule 270 §405][SIP Rule 42] [40 CFR §60.8(e)]

x. Minimum Testing Requirements:

Each performance test shall consist of three separate test runs with each test run being at least one hour in duration unless otherwise specified in the applicable standard or in this permit. The same test methods shall be used simultaneously for both the inlet and outlet measurements or justification for any necessary exceptions shall be provided in the test protocol. Emissions rates, concentrations, grain loadings, and/or efficiencies shall be determined as the arithmetic average of the values determined for each individual test run. Performance tests may only be stopped for good cause, which includes forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control. Termination of a performance test without good cause after the first test run has commenced shall constitute a failure of the performance test.

[County Rule 270 §406] [40 CFR §60.8(f)]

xi. Combined Cycle Systems:

1) The sampling time and sample volume for each $PM_{10}$ test run shall be at least 120 minutes and 1.70 dscm (60 dscf).

[40 CFR §60.48a(b)]

2) If compliance with the ammonia limit included in these permit conditions is not demonstrated using the results of three one-hour minimum test runs, the performance test shall be repeated with each of the three test runs being at least eight hours in duration.

[County Rule 200 §309]

xii. Test Report Submittal:
The Permittee shall complete and submit a separate test report for each performance test to the Department within 45 days after the completion of testing. The test report shall be prepared in accordance with the most recent version of the Department's "Air Quality Performance Test Guidelines for Compliance Determination in Maricopa County.". A completed copy of the Department's "Test Report Submittal Form" shall accompany each test report.

[County Rule 270 §301.1][SIP Rule 27 §B]

xiii. Compliance with Emission Limits:
Compliance with allowable emission limits and standards shall be determined by the performance tests specified in this permit. If test results do not demonstrate compliance with the requirements of these permit conditions, the Permittee shall make the necessary repairs and/or adjustments to the equipment and demonstrate compliance through retesting. This will not nullify the fact that test results did not demonstrate compliance with the requirements of the permit conditions or nullify any violations that may result from this noncompliance. In addition to compliance demonstrations, test results shall be used for annual emissions inventory purposes if the Permittee is required to complete an emissions inventory survey.

[County Rule 270 §407]

xiv. Correspondence:
All test extension requests, test protocols, test date notifications, and test reports required by this permit shall be submitted to the Department and addressed to the attention of the Performance Test Evaluation Supervisor.

[County Rule 270 §301.1][SIP Rule 27 §B]

xv. Authority:
The above testing requirements represent the minimum level of testing to monitor for compliance with the emission limits in this permit. Nothing in this section shall prevent the Control Officer from requiring additional source testing as deemed necessary to ensure permit compliance and protection of the public health and welfare.

[County Rule 200 §309][County Rule 270 §402.5]

## 4. EMISSION CONTROL EQUIPMENT:

a. OPERATIONAL REQUIREMENTS:

i. Selective Catalytic Reduction (SCR) System:

1) The Permittee shall install, operate, and maintain a SCR system as part of CC3 and CC5.

2) The Permittee shall at all times comply with the currently approved version of the O&M Plan.

3) The SCR control system shall be designed so it will not inject ammonia into the SCR system when the inlet temperature to the catalyst is less than 520 ºF or the Minimum Catalyst Temperature in the approved O&M Plans.

4) The Permittee shall conduct an inspection of the SCR control system at least every 24 calendar months. This shall include, at a minimum, an inspection of the upstream face of the catalyst to check for debris which would cause obstructions to gas flow or which would resist thermal expansions and other inspections as required by the most recently approved O&M Plan.

5) If the inspection, operating data, or emission rate data indicate that the catalyst may need to be replaced, the Permittee shall analyze a sample of the catalyst within 30 days following such indication or as specified in the approved O&M Plan.

[County Rule 210 §§302.1(c) (1)] [locally enforceable only]

ii. Oxidation Catalyst:

1) The Permittee shall install, operate, and maintain an Oxidation Catalyst Emission Control System as part of CC4 and CC5.

2) The Permittee shall at all times comply with the currently approved version of the O&M Plan.

3) The maximum temperature of the oxidation catalyst shall not exceed 1000 ºF as measured at the catalytic oxidizer inlet or the maximum temperature in the currently approved version of the O&M plan. The approved oxidation catalyst temperature range is 350 - 1000 ºF during normal operations.

4) Permittee shall conduct an inspection of the oxidizing catalyst control system at least every 24 calendar months. This shall include, at a minimum, an inspection of the upstream face of the catalyst to check for debris which would cause obstructions to gas flow or which would resist thermal expansions and other inspections as required by the most recently approved O&M Plan.

5) If the inspection, operating data, or emission rate data indicate that the catalyst may need to be replaced, the Permittee shall analyze a sample of the catalyst within 30 days following such indication or as specified in the approved O&M Plan.

[County Rule 210 §302.1(c)(1)] [locally enforceable only]

b. RECORDKEEPING REQUIREMENTS:
The Permittee shall record the results of the inspections required in paragraphs i.4) and ii.4) of this Condition in a readily available facility log.

[County Rule 210 §§302.1(c)(1) and (d)] [locally enforceable only]

**5. CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS):**
The requirements of this section apply to CC3, CC4, and CC5 as specified. If there is a conflict between Parts 60 and 75, Part 75 shall govern.

[County Rule 210 §302.1] [locally enforceable only]

a. OPERATIONAL REQUIREMENTS:

i. The Permittee shall operate a continuous emissions monitoring system (CEMS) on CC3, CC4, and CC5 emission units. The CEMS, at a minimum, shall consist of a $NO_x$ concentration monitor, a CO concentration monitor, and an $O_2$ or $CO_2$ diluent gas monitor in accordance with the applicable provisions of 40 CFR Part 75 and 40 CFR Part 60.48b(b), 60.49b(b) Appendices B and F. The requirements include but are not limited to the following:

1) Daily zero and span calibration drifts according to 40 CFR 60.13(d). Note that daily zero, span and Quality Assurance activities are not required on any calendar day in which no fuel is combusted in the unit for which the CEMS is monitoring or if a malfunction of the CEMS occurs preventing the calibration to be performed in which case a daily calibration is required to be conducted as soon as the CEMS has been repaired and placed back in service.

2) The CEMS shall be in continuous operation and meet minimum frequency of operation according to the requirements of 40 CFR 60.13(e)

3) The fuel flow meters shall meet the ongoing QA requirements of 40 CFR 75, Appendix D., Section 2.1.6

4) The Permittee shall meet the minimum CEMS data requirements of 40 CFR 60.48b(c) and shall be operational whenever fuel is combusted. Malfunctions shall be recorded and reported as required in 40 CFR Part 60.48b(c), 40CFR Part 60.48b(f), 40CFR Part 60.49b(g) and 40 CFR 75.

ii. The Permittee shall ensure that the design, installation, operation, maintenance, and O&M/QA Plan(s) meet the data capture of the applicable requirements of 40 CFR Parts 60 Appendix B and F, 40 CFR 75.21.

iii. The Permittee shall at all times comply with the currently approved version of the O&M and QA Plans.

[40 CFR 75, Subpart C]

iv. The Permittee shall conduct a RATA, bias checks, linearity checks, cylinder gas audits (CGA), calibration error and drift checks as required by 40 CFR 60 and 40 CFR 75.

v. The Permittee shall ensure that all calibration gases (including zero gases) are certified and current at all times. The certification of zero air gases is unlimited and there is no expiration date for their certification.

[40 CFR 60.48b(b)(2), and 40 CFR 75.22(c)]

vi. The Permittee shall re-calibrate any CEMS after any maintenance activity that could affect the system calibration and shall re-certify, for the $NO_x$ and $O_2$ or $CO_2$ diluent CEMS, as required by and within the time periods required by 40 CFR 75.20(b) whenever the Permittee makes a replacement, modification, or change that may significantly affect the ability of the system to accurately measure or record emissions.

[40 CFR 75.20(b)]

vii. The Permittee shall develop and implement the necessary operational and maintenance measures, which may include use of daily, monthly, quarterly, and annual maintenance checklists, to ensure proper operation and accuracy of the CEMS. The measures will be established as part of the O&M and QA Plans.

[40 CFR 75 Appendix B]

viii. The Permittee shall maintain records of all certifications, calibrations, testing, maintenance (including completed maintenance checklists), and repairs made to the CEMS.

[County Rule 210 §302.1(c) (1)][40 CFR 60.7(f)]
[40 CFR 75 Appendix B]

ix. A natural gas fuel flowmeter shall be installed, certified, and operated on each fuel line to CC4, and CC5 emission units to monitor the unit-specific fuel flow to the combustion turbines and duct burners in accordance with 40 CFR Part 75. A natural gas fuel flowmeter shall be installed and operated in accordance with manufacturer's specifications on the Clayton Boiler to monitor natural gas fuel combusted in the boiler. A natural gas fuel flowmeter shall be installed and operated in accordance with the procedures of 40 CFR Part 75 (except for USEPA certification) on each natural gas fuel line to CC3.

[40 CFR 60.49b(d)] [40 CFR 60.48c(g)][40 CFR 75.4(g)]

b. DATA ACQUISITION SYSTEM (DAS):
The operating and emissions information required in Sections i. and ii. above shall be compiled by a computerized DAS, which shall be programmed to calculate and track the short-term and annual emission rates of all compounds, using the measurements and formulas described herein. For the $NO_x$ and $O_2$ or $CO_2$ diluent CEMS, the Permittee shall meet the requirements of 40 CFR

Part 75, including but not limited to the following:

75.10 – General Monitoring Requirements
75.12 – Specific Provisions for Monitoring $NO_x$ Emission Rate
Subpart C – Operation and Maintenance Requirements
Subpart D – Missing Data Substitution Procedures
Subpart F – Recordkeeping Requirements
Appendix A – Specifications and Test Procedures;
Appendix B – Quality Assurance and Quality Control Procedures
Appendix C – Missing Data Estimation Procedures
Appendix F – Conversion Procedures

c. $NO_x$ EMISSIONS:
$NO_x$ emissions shall be measured using the continuous emission monitoring system (CEMS) applied to each of the emission units. The Permittee shall daily calculate the 365-day rolling average $NO_x$ emission to verify that the $NO_x$ emission limit in Table 1 of Permit Condition 1 is not exceeded. The $NO_x$ CEMS shall meet the requirements of both 40 CFR Part 75 and 40 CFR Part 60, Appendix B and Appendix F.

[County Rule 210 §302.1.c] [locally enforceable only]

d. CO EMISSIONS:
CO emissions shall be measured using a CEMS that has been installed, certified, and operated in accordance with 40 CFR Part 60, including but not limited to the following: 60.13 – Monitoring Requirements; Appendix B – Performance Specification 4A; and Appendix F – Quality Assurance Procedures. The Permittee shall daily calculate the 365-day rolling average CO emission to verify that the CO emission limit in Table 1 of Permit Condition 1 is not exceeded.

[County Rule 210 §302.1.c] [locally enforceable only]

i. In the event that the CO analyzer measuring startup/shutdown emissions is not operational or cannot reliably document emissions, startup/shutdown CO emissions shall be determined by monitoring the total elapsed time in hours during each phase of the startup/shutdown sequence (rounded to hundredths), and multiplying by the emission rates listed in Table 6. The calculation shall be made by the computerized Data Acquisition System (DAS) described in Permit Condition 5.b.

[County Rule 210 §302.1.c] [locally enforceable only]

**Table 6: Calculated Startup/Shutdown Emissions:**

| Unit | Pollutant | Startup/Shutdown Phase and Operational Criteria | lb/hr rate |
|---|---|---|---|
| CC5 | CO | Phase 1 – Oxidation Catalyst Temp < 450F | 870.0 |
| CC5 | CO | Phase 2 and 3 – Oxidation Catalyst Temp > 450F | 87.0 |
| CC5 | VOC | Phase 1 – Oxidation Catalyst Temp < 450F | 29.0 |
| CC5 | VOC | Phase 2 and 3 – Oxidation Catalyst Temp > 450F | 20.3 |
| CC4 | CO | Phase 1 – Oxidation Catalyst Temp < 450F | 435.0 |
| CC4 | CO | Phase 2 and 3 – Oxidation Catalyst Temp > 450F | 43.5 |
| CC4 | VOC | Phase 1 – Oxidation Catalyst Temp < 450F | 15.0 |
| CC4 | VOC | Phase 2 and 3 – Oxidation Catalyst Temp > 450F | 10.5 |
| CC3 | CO | Phase 1 and 2 – All Startup/shutdown Emissions | 440.0 |
| CC3 | VOC | Phase 1 and 2 – All Startup/shutdown Emissions | 12.4 |

e. VOC EMISSIONS:
VOC emissions for normal operations shall be determined through fuel usage monitoring and application of the appropriate emission factors from the most recently Department approved source emissions test for CC4 and CC5 or the emission factors contained in Table 3 and a factor of 0.0048 lb/MMBtu for CC3 when firing natural gas, if no Department approved source emissions test factors for the specific unit are available. Startup/shutdown VOC emissions from CC3, CC4, and CC5 will be determined by monitoring the total elapsed time during each phase of the startup/shutdown sequence, and multiplying by the emission rates listed in Table 3. The VOC emissions from CC3, CC4, and CC5, including normal operations and startup and shutdown emissions, shall be monitored with an automatic data acquisition and handling system. The system must be capable of automatically performing the VOC emission calculations described above.

The Permittee daily shall calculate the 365-day rolling average VOC emission to verify that the VOC emission limit in Table 1 of Permit Condition 1 is not exceeded.

[County Rule 210 §302.1.c] [locally enforceable only]

f. $PM_{10}$ EMISSIONS:
$PM_{10}$ emissions for normal operations and startup/shutdowns shall be determined through fuel usage monitoring and application of the appropriate emission factors from the most recently Department approved source emissions test for CC4 and CC5 or the emission factors contained in Table 3 and a factor of 0.00639 lb/MMBtu for CC3 for natural gas, if no Department approved source emissions test factors for the specific unit are available. The $PM_{10}$ emissions from CC3, CC4, and CC5, including normal operations and startup and shutdown emissions, shall be monitored with an automatic data acquisition and handling system. The system must be capable of automatically performing the $PM_{10}$ emission calculations described above.

The Permittee shall daily calculate the 365-day rolling average $PM_{10}$ emission to verify that the $PM_{10}$ emission limit in Table 1 of permit condition 1 is not exceeded.

[County Rule 210 §302.1.c] [locally enforceable only]

g. $SO_2$ EMISSIONS:
$SO_2$ emissions from gas firing shall be determined through fuel usage monitoring and application of the Acid Rain (40 CFR 75) natural gas emission factor of 0.0006 lb/MMBtu.

[40 CFR 75.19(c)]

h. RECORDKEEPING:
A file shall be maintained of all measurements including continuous monitoring system evaluations, all continuous monitoring system or monitoring device calibration checks, adjustments and maintenance performed on these systems or devices as required by 40 CFR Part 60 or Part 75. The records shall be recorded in a permanent form suitable for inspection. The file shall be maintained for at least five years following the date of such measurement, maintenance, report, or record.

[County Rule 210 §§302.1 d] [locally enforceable only]
[40 CFR 60.7(f)] [40 CFR 60.49b(g)] [40 CFR 75 Appendix B]

i. OPERATION AND MAINTENANCE (O&M) PLANS:
The Permittee shall develop and maintain written O&M Plans for all components integral to the equipment used to monitor, control or limit emissions from combustion Units CC3, CC4, and CC5.This includes all control equipment and CEMs as listed in the equipment list in Appendix A. These O&M Plans shall be approved in writing by the Control Officer. The O&M Plans developed for monitoring equipment shall meet the applicable content requirements of 40 CFR Part 75 and Part 60 Appendix F. Development, maintenance of, and operating in accordance with the approved O&M Plans shall be required as an element to demonstrate compliance with this Permit.

[County Rule 210 §§302.1.e, 305][locally enforceable only]

## 6. COOLING TOWERS:

a. DRIFT ELIMINATORS:
The cooling tower shall at all times be equipped and maintained with high efficiency drift eliminators certified by the cooling tower vendor to achieve less than 0.001 percent drift. The total dissolved solids (TDS) content of the cooling water in the cooling tower shall not contain more than 12,000 ppm TDS.

[County Rule 240 §308]
[County Rule 322 §301.3 b] [locally enforceable only]

i. The Permittee shall monthly inspect the Wet Cooling Tower drift eliminators for proper installation, maintenance, and operation. The results of the inspection shall be recorded in a facility log.

[County Rule 322 § 301.3][County Rule 210 §302.1.c(2)][locally enforceable only]

b. WATER CONDUCTIVITY:
The Permittee shall daily monitor and record the conductivity of the cooling tower water and shall monthly monitor and record the TDS content of the cooling tower water.

[County Rule 210 §302.1][locally enforceable only]

c. $PM_{10}$ EMISSION CALCULATIONS:
$PM_{10}$ emissions from the CC4 and CC5 cooling towers will be determined through monthly testing of Total Dissolved Solids (TDS) concentrations and calculations using the following

equation:

$PM_{10}$ (lb/hr) = Tower capacity (gpm) * TDS (ppm) * 1.26E-9

where 1.26E-9 = (8.4 lb/gal) (0.0005% drift) (60 min/hr) (0.5 $PM_{10}$/PM) (10E-6/ppm)

[County Rule 210 §302.1.c] [locally enforceable only]

**7. SEMIANNUAL MONITORING REPORT AND COMPLIANCE CERTIFICATION:**

The Permittee shall file the first semiannual Monitoring Report and Compliance Certification no later than April 30, and shall report the monitoring and compliance status of the source during the period between October 1 and March 31 of each year. The second report shall be submitted no later than October 31 and shall report the monitoring and compliance status of the source during the period between April 1 and September 30 of each year. The Monitoring report and Compliance Certification shall be separate documents, with each document requiring a signed certification statement by the Responsible Official. The semiannual Monitoring Report and Compliance Certification shall be sent to the Compliance Division with attention to: Compliance Division Manager and shall contain the information required by Condition 49 of this permit and the following information at a minimum:

[County Rule 210 §§305.1 and 302.1] [SIP Rule 32] [40 CFR 60.7 and 60.19]

The Compliance Certification shall include the following information:

a. The identification of each permit term or condition of the permit that is the basis of the certification, the compliance status of each term or condition, whether the compliance was intermittent or continuous, and the method(s) used for determining the compliance status of the source.

b. Description of and an explanation for any deviations from any permit condition at any time.

c. A certification as to the truth and accuracy of the information provided.

d. In addition to the information provided in the Compliance Certification, the Permittee shall submit the following information at a minimum in the Monitoring Report.

i. A summary of the daily hours of the operation for each combustion turbine, duct burner, and auxiliary boiler.

[40CFR60.48c(g)] [40 CFR 60.49b(d)]

ii. Dates on which visible emissions observations were taken, the test method used, and the results of the observations;

[County Rule 300 §500] [locally enforceable only]

iii. Fuel supplier certification or other documentation as detailed in Permit Condition 2.a.ix. regarding sulfur content for all fuel combusted;

[County Rule 322 §503] [County Rule 323 §502] [locally enforceable only] [40 CFR 60.49b(j)]

iv. Any other records and reports required by any Permit Condition contained in this Permit.

e. A certification as to the truth and accuracy of the information provided.

[County Rule 210 §302.1 d][locally enforceable only]

f. Records of any monitoring required by this Permit shall include the following:

i. The date, place as defined in the permit, and time of sampling or measurements;

ii. The date(s) analyses were performed;

iii. The company or entity that performed the analyses;

iv. The analytical techniques or methods used;

v. The results of such analyses; and

vi. The operating conditions as existing at the time of sampling or measurement

[County Rule 210 §§302.1 d (1)] [locally enforceable only]

**8. $PM_{10}$ OFFSET REQUIREMENTS:**

The following requirements apply to the emission offsets for $PM_{10}$ associated with the Significant Revision in 2001:

**Table 7: Road Segments Paved for the $PM_{10}$ Emission Offsets**

| Road Name | From | To | Length in Miles | Vehicles per Day | $PM_{10}$ Emission Credits |
|---|---|---|---|---|---|
| **Maricopa County Roads** | | | | | |
| Atlanta Ave | End of Maintenance | 115th Ave | 0.52 | 113 | 9.9 |
| 49th Dr | Sunrise Dr | Olney Ave | 0.26 | 101 | 4.4 |
| Steinway Dr Phx | 51st Ave | 49th Dr | 0.19 | 83 | 2.6 |
| Redfield Rd W | 51st Ave | 49th Dr Alignment | 0.25 | 77 | 3.2 |
| **City of Goodyear Roads** | | | | | |
| Bullard Ave | I-10 | Thomas Rd | 1.25 | 100 | 21 |
| 147th Ave | Hunt Rd | W Riggs Rd | 1.05 | 102 | 18 |
| W Riggs Rd | 187th Ave | 147th Ave | 5.0 | 113 | 95 |
| City Alleys | -- | -- | 3.8 | 22 | 14 |
| Alley 1 | Via Villa St | Via Maria St | -- | -- | -- |
| Alley 2 | Via Maria St | Via Elena St | -- | -- | -- |
| Alley 3 | Via Elena St | Calle Adobe Ln | -- | -- | -- |
| Alley 4 | Calle Adobe Ln | Calle Bolo Ln | -- | -- | --- |
| Alley 5 | Calle Bolo Ln | Calle Chulo Rd | -- | -- | -- |
| Alley 6 | La Vista Dr | La Mar Blvd | -- | -- | -- |
| Alley 7 | La Mar Blvd | La Paz Dr | -- | -- | -- |
| Alley 8 | La Paz Dr | La Canada Blvd | -- | -- | -- |
| Alley 9 | La Canada Blvd | Solano Dr | -- | -- | -- |
| Alley 10 | Los Robles Dr | La Jolla Blvd | -- | -- | -- |
| Alley 11 | N Litchfield Rd | Las Palmas Dr | -- | -- | -- |
| Alley 12 | Las Palmas Dr | Los Alamos Dr | -- | -- | -- |
| Alley 13 | Solano Dr | Loma Linda Blvd | -- | -- | -- |
| Alley 14 | La Canada Blvd | La Pasada Blvd | -- | -- | -- |
| Alley 15 | Los Olivos Dr | Las Verdes Dr | -- | -- | -- |
| Alley 16 | Litchfield Rd | San Xavier Blvd | -- | -- | -- |
| Total | | | 12.3 | | 168.1 |

a. ROAD INTEGRITY RESPONSIBILITIES:
The Permittee shall for a period of 30 years shall:

i. At least once every two years after the initial summary report required by Subsection 304.1 is submitted obtain a copy of the local or state governments' report evaluating the condition of each roadway segment(s) identified in Rule 242 §304.1; and

ii. Review the report upon receipt and determine if any roadway segment(s) identified in Section 304.1 is degraded. The roadway segment shall be considered degraded if the segment is below the standards of reconstruction, per the rating system(s) utilized by the local or state governments' reports.

iii. Within 60 days of receipt of the report, submit to the Control Officer a copy of the report and a statement identifying any roadway segment(s) that is degraded.

b. OFFSET INTEGRITY RESPONSIBILITIES:

i. If pursuant to Rule 242 §305.3 any of the road segments paved and approved by the Control Officer under Rule 242 §304.2 are found to be degraded, then within 12 months of the report submittal date, the applicant shall provide replacement offsets.

ii. Replacement offsets may be provided by:

1) Repaving the degraded road segment(s) identified in Rule 242 §305.3, and upon completion submit a report that includes the information specified in Rule 242 §304.1 or

2) Generating the appropriate number of $PM_{10}$ offsets pursuant to Rule 242 or

3) Generating the appropriate number of $PM_{10}$ offsets pursuant to Rule 204.

c. MONITORING AND RECORDKEEPING:

i. After the Control Officer has issued an approval of the emission reductions in writing, copies of the documents submitted and/or obtained pursuant to Sections 301, 303.2, 304.1, 305.1, 305.2 and 306 shall be maintained onsite for a minimum of thirty (30) years and provided to the Control Officer upon request.

ii. TEST METHODS**:**

Unless the applicant uses the default silt content values provided in Appendix A, silt content of the unpaved road segments shall be determined using the sampling and laboratory analysis procedures provided in EPA's "Compilation of Air Pollutant Emission Factors," (AP-42), Fifth Edition, Volume 1, Appendix C.1. If the applicant performs any silt content analysis, or has such analysis performed on its behalf, the applicant must use the silt content determined from that analysis to calculate $PM_{10}$ emissions.

## 9. PERMIT SHIELD – ACID RAIN PERMIT:

a. PERMIT SHIELD:
Compliance with the conditions of this Permit shall be deemed compliance with the applicable requirements identified in Appendix B of this Permit. The Permit Shield shall not extend to minor permit revisions.

[County Rule 210 §§405.7, 407]

b. ACID RAIN PERMIT:

i. The Acid Rain Phase II Permit Application and Certificate of Representation signed by the Designated Representative and submitted to the Control Officer shall constitute the Permittee's Acid Rain Permit.

ii. The Permittee shall comply with the Acid Rain Permit, 40 CFR Parts 72, 73, and 75, and the Acid Rain requirements of Permit Condition 24.a.

iii. The relevant Conditions of this Permit and the Acid Rain Permit, including but not limited to, the Allowable Emission Limits, Operation Requirements, Monitoring/Recordkeeping Requirements, Reporting Requirements, and Testing Requirements shall constitute the Compliance Plan required by 40 CFR Part 72 Subpart D.

iv. The Permittee shall hold $SO_2$ Allowances as of the allowance transfer deadline in each Combined Cycle System compliance subaccount not less than the total annual actual emissions of $SO_2$ for the previous calendar year from each combined Cycle System as required by the Acid Rain Program.

v. The $SO_2$ Allowance Allocations for each Combined Cycle System are as follows:

**Table 8: $SO_2$ Allowances**

| Affected Units | Pollutant | Years 2000 - 2009 | Years 2010 and thereafter |
|---|---|---|---|
| 4 | $SO_2$ | 11 | 9 |
| 6 | $SO_2$ | 22 | 15 |
| CC4 | $SO_2$ | NA | NA |
| CC5 | $SO_2$ | NA | NA |

NA means no allocations are available since these are new units.

[County Rule 371][40 CFR 72, 73, and 75]

An Acid Rain Retired Unit exemption is currently established for West Phoenix units 4 and 6.

None of these units are subject to a $NO_x$ limit pursuant to 40 CFR Part 76.

## RULE 310: FUGITIVE DUST FROM DUST-GENERATING OPERATIONS

### 10. APPLICABILITY:

a. The provisions of this Permit Section apply to all dust-generating operations except for those dust-generating operations listed in the Condition below. Any person engaged in a dust-generating operation subject to this Permit Section shall be subject to the standards and/or requirements of this Permit Section before, after, and while conducting such dust-generating operation, including during weekends, after work hours, and on holidays.

b. For the purpose of Rule 310, any control measure that is implemented must achieve the applicable standard(s) described in Rule 310, as determined by the corresponding test method(s), as applicable, and must achieve other applicable standard(s) set forth in Rule 310.

c. Regardless of whether a dust-generating operation is in compliance with an approved Dust Control Plan the owner and/or operator of a dust-generating operation shall be subject to all applicable requirements of Rule 310 at all times.

d. Failure to comply with the provisions of these requirements, as applicable, and/or of an approved Dust Control Plan, shall constitute a violation.

[SIP Rule 310 §§102, 301]

### 11. EXEMPTIONS:

The provisions of this Permit Section shall not apply to the following activities:

a. Emergency activities that may disturb the soil conducted by any utility or government agency in order to prevent public injury or to restore critical utilities to functional status.

b. Establishing of initial landscapes without the use of mechanized equipment or conducting landscape maintenance without the use of mechanized equipment. However, establishing initial landscapes without the use of mechanized equipment and conducting landscape maintenance without the use of mechanized equipment shall not include grading or trenching performed to establish initial landscapes or to redesign existing landscapes.

[SIP Rule 310 §103]

**12. DUST CONTROL PLAN REQUIREMENTS:**

a. The owner and/or operator of a dust-generating operation shall submit to the Control Officer a Dust Control Plan with any permit applications that involve dust-generating operations with a disturbed surface area that equals or exceeds 0.10 acre (4,356 square feet) before commencing any routine dust-generating operation. The Dust Control Plan shall be kept available onsite at all times.

b. The Permittee shall comply with the requirements of the Dust Control Plan and the provisions of MCAQD Rule 310 Sections 301 – 310 at all times.

[SIP Rule 310 §§ 301-310, 409]

**13. VISIBLE EMISSION REQUIREMENTS FOR DUST-GENERATING OPERATIONS:**

a. The Permittee shall not cause or allow visible fugitive dust emissions to exceed 20% opacity.

b. The Permittee shall not cause or allow visible emissions of particulate matter, including fugitive dust, beyond the property line within which the emissions are generated. Visible emissions shall be determined by a standard of no visible emissions exceeding 30 seconds in duration in any six-minute period as determined by using EPA Reference Method 22. This requirement does not apply to dust-generating operations conducted within 25 feet of the property line.

[SIP Rule 310 §303.1]

**14. EXEMPTIONS FROM DUST-GENERATING OPERATION OPACITY LIMITATION REQUIREMENT:**

a. If wind conditions cause fugitive dust emissions to exceed the opacity requirements in this permit, despite implementation of the Dust Control Plan, an owner and/or operator shall:

i. Ensure that all control measures and requirements of the Dust Control Plan are implemented and the subject violations cannot be prevented by better application, operation, or maintenance of these measures and requirements.

ii. Cease dust-generating operations and stabilize any disturbed surface area consistent with the Stabilization Requirements of these conditions.

iii. Compile records consistent with the recordkeeping requirements of these Permit Conditions and document the control measure and other Dust Control Plan requirements implemented.

b. Emergency Maintenance of Flood Control Channels and Water Retention Basins: The opacity limit shall not apply to emergency maintenance of flood control channels and water retention basins, provided that control measures are implemented.

**15. STABILIZATION REQUIREMENTS FOR DUST-GENERATING OPERATIONS:**

a. Unpaved Parking Lot: The owner and/or operator of any unpaved parking lot shall not allow visible fugitive dust emissions to exceed 20% opacity and shall not allow silt loading equal to or greater than 0.33 oz/ft$^2$. However, if silt loading is equal to or greater than 0.33 oz/ft$^2$, then the owner and/or operator shall not allow the silt content to exceed 8%. An unpaved parking lot includes any area that is not paved and that is used for parking, maneuvering, material handling, or storing motor vehicles and equipment

[SIP Rule 310 §§ 232, 304.1]

b. Unpaved Haul/Access Road:
An unpaved haul/access road includes any on-site road or equipment path that is not paved and is used by commercial, industrial, institutional, and/or governmental traffic.

i. The owner and/or operator of any unpaved haul/access road (whether at a work site that is under construction or at a work site that is temporarily or permanently inactive) shall not allow visible fugitive dust emissions to exceed 20% opacity and shall not allow silt loading equal to or greater than 0.33 oz/ft$^2$. However, if silt loading is equal to or greater than 0.33 oz/ft$^2$, then the owner and/or operator shall not allow the silt content to exceed 6%.

ii. The owner and/or operator of any unpaved haul/access road (including at a work site that is under construction or a work site that is temporarily or permanently inactive) shall, as an alternative to meeting the stabilization requirements for an unpaved haul/access road in Subsection [15.b.i] of this Condition, limit vehicle trips to no more than 20 per day per road and limit vehicle speeds to no more than 15 miles per hour. If complying with this subsection of this Permit, the owner and/or operator must include, in a Dust Control Plan, the maximum number of vehicle trips on the unpaved haul/access roads each day (including number of employee vehicles, earthmoving equipment, haul trucks, and water trucks) and a description of how vehicle speeds will be restricted to no more than 15 miles per hour.

[SIP Rule 310 §304.2]

c. Disturbed Surface Area: The owner and/or operator of any disturbed surface area on which no activity is occurring (including at a work site that is under construction or a work site that is temporarily or permanently inactive) shall meet at least one of the standards described below, as applicable. Should such a disturbed surface area contain more than one type of stabilization characteristic, such as soil, vegetation, or other characteristic, which is visibly distinguishable, then the owner and/or operator shall test each representative surface separately for stability, in an area that represents a random portion of the overall disturbed conditions of the site, in accordance with the appropriate test methods described in Section 501.2(c) of Rule 310 and in Appendix C (Fugitive Dust Test Methods) of MCAQD rules. The owner and/or operator of such disturbed surface area on which no activity is occurring shall be considered in violation of Rule 310 if the area is not maintained in a manner that meets at least one of the standards listed below, as applicable. An area is considered to be a disturbed surface area until the activity that caused the disturbance has been completed and the disturbed surface area meets the standards described in this subsection.

i. Maintain a soil crust;

ii. Maintain a threshold friction velocity (TFV) for disturbed surface areas corrected for non-erodible elements of 100 cm/second or higher;

iii. Maintain a flat vegetative cover (i.e., attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%;

iv. Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 30%;

v. Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements;

vi. Maintain a percent cover that is equal to or greater than 10% for non-erodible elements; or

vii. Comply with a standard of an alternative test method, upon obtaining the written approval from the Control Officer and the Administrator.

[SIP Rule 310 §304.3]

**16. SOIL MOISTURE:**

If water is the chosen control measure in an approved Dust Control Plan, the owner and/or operator of a dust-generating operation shall operate a water application system on-site (e.g., water truck, water hose) while conducting any earthmoving operations on disturbed surface areas 1 acre or larger, unless a soil crust is maintained or the soil is sufficiently damp to prevent loose grains of soil from becoming dislodged.

[SIP Rule 310 §307]

**17. DUST CONTROL TRAINING CLASSES FOR DUST-GENERATING OPERATIONS:**

a. At least once every three years, the following people shall successfully complete a Basic Dust Control Training Class conducted or approved by the Control Officer.

i. Water truck drivers.

ii. Water-pull drivers.

iii. The site superintendent or other designated on-site representative of the permit holder.

b. Any certification issued to a person having successfully completed a Basic Dust Control Training Class conducted or approved by the Control Officer may be suspended or revoked for cause, including, but not limited to, inappropriate ethical activities or conduct associated with the dust control program.

[SIP Rule 310 §309.1]

The Permittee shall maintain the following records for the time period specified in Condition 18 and make them available to the Control Officer upon request:

c. The Permittee shall keep a written record of self-inspection on each day dust-generating operations are conducted. Self-inspection records shall include daily inspections for crusted or damp soil, trackout conditions and clean-up measures, daily water usage, and dust suppressant application. Such written record shall also include the following information:

i. Method, frequency, and intensity of application or implementation of the control measures;

ii. Method, frequency, and amount of water application to the site;

iii. Street sweeping frequency;

iv. Types of surface treatments applied to and maintenance of trackout control devices, gravel pads, fences, wind barriers, and tarps;

v. Types and results of test methods conducted;

vi. If contingency control measures are implemented, actual application or implementation of contingency control measures and why contingency control measures were implemented;

vii. List of subcontractors' names and registration numbers updated when changes are made; and

viii. Names of employee(s) who successfully completed dust control training class(es), date of the class(es) that such employee(s) successfully completed, and name of the agency/representative who conducted such class(es).

[SIP Rule 310 §502.1]

d. Upon verbal or written request by the Control Officer, the log or the records and supporting documentation shall be provided as soon as possible but no later than 48 hours after the request,

excluding weekends. If the Control Officer is at the site where requested records are kept, records shall be provided without delay.

[SIP Rule 310 §§502.3]

**18. RECORDS RETENTION:**

The Permittee shall retain copies of approved Dust Control Plans, control measures implementation records, and all supporting documentation for at least six months following the termination of the dust-generating operation and for at least two years from the date such records were initiated.

[SIP Rule 310 §503]

**NON-RESALE GASOLINE STORAGE AND DISPENSING**

The following conditions apply to the following equipment:

2,000 gasoline tank

**19. ALLOWABLE THROUGHPUT:**

The Permittee shall limit the delivery of gasoline to the facility to no more than 10,000 gallons per month and 120,000 gallons per any twelve consecutive month time period.

[Rule 220 §302.2] [Locally Enforceable Only]

**20. OPERATING LIMITATION:**

The Permittee shall dispense no resold gasoline at the facility.

[Rule 220 §302.2] [Locally Enforceable Only]

**21. GENERAL DUTIES TO MINIMIZE EMISSIONS:**

At all times, the Permittee shall operate and maintain each gasoline storage tank, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Control Officer which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR §63.11115(a)]

**22. EMISSION LIMITATIONS AND MANAGEMENT PRACTICES:**

The Permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

a. Minimize gasoline spills;

b. Clean up spills as expeditiously as practicable;

c. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;

d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

[40 CFR §§ 63.11116(a)]

**23. VAPOR LOSS CONTROL MEASURE REQUIREMENTS:**

The Permittee shall not transfer or permit the transfer of gasoline from any gasoline delivery vessel into any stationary dispensing tank located above or below ground with a tank capacity of more than 250 gallons unless the following requirements are met:

a. Basic Tank Integrity:

i. No vapor or liquid escapes are allowed through a dispensing tank's outer surfaces or from

any of the joints where the tank is connected to pipe, wires, or other systems.

[Rule 353 §301] [Locally Enforceable Only]

ii. VOC Emission Standard:
Tanks and their fittings shall be vapor tight except for the outlet of a pressure/vacuum relief valve on a dispensing tank's vent pipe. Specifically, this means that at a probe tip distance of 1 inch (2.5 cm) from a surface, no vapor escape shall exceed 20% of the lower explosive limit (LEL). This applies to tanks containing gasoline regardless of whether they are currently being filled, and to caps and other tank fittings.

For the purpose of this Permit, vapor tight is defined as a condition in which an organic vapor analyzer (OVA) or a combustible gas detector (CGD) at a potential VOC leak source shows either less than 10,000 ppm when calibrated with methane or less than 20% of the LEL, when prepared according to the manufacturer and used according to Rule 353, Section 504.3

[Rule 353 §§218, §301.1(b)] [Locally Enforceable Only]

iii. Leakage Limits: For storage and receiving operations, no liquid gasoline escape of more than 3 drops per minute is allowed, including leaks through the walls of piping, fittings, fill hose(s), and vapor hose(s). Gasoline drainage loss from the end of a fill hose or a vapor hose shall not exceed 2 teaspoonfuls in the course of a connect or disconnect process.

[Rule 353 §301.2; SIP Rule 353 §301.3]

iv. Spill Containment Equipment:

1) The entire spill containment system including gaskets shall be kept vapor tight.

a) The outer surface of the spill containment receptacle shall have no holes or cracks and shall allow no vapors to pass from the dispensing tank through it to the atmosphere.

b) Spill containment receptacles shall be kept clean and free of foreign material at all times.

[Rule 353 §301.3(a)] [Locally Enforceable Only]

2) If the spill containment is equipped with a passageway to allow material trapped by the containment system to flow into the interior of the dispensing tank:

a) The passageway shall be kept vapor tight at all times, except during the short period when a person opens the passageway to immediately drain material trapped by the containment system into the tank.

b) The bottom of the receptacle shall be designed and kept such that no puddles of gasoline are left after draining through the passageway has ceased.

[Rule 353 §301.3(b)] [Locally Enforceable Only]

3) The dispensing tank owner/operator is responsible for assuring that before a delivery vessel leaves the premises after a delivery:

a) Any gasoline in a dispensing tank's spill containment receptacle has been removed.

b) Any gasoline that a person has taken out of a spill receptacle, as a free liquid or as absorbed into/onto other material removed from the receptacle, shall be contained in such a way that VOC emission is prevented; disposal in conformance with applicable hazardous waste rules is sufficient to meet this requirement.

c) Any plunger/stopper assembly is unimpeded and sealing correctly.

[Rule 353 §301.3(c)] [Locally Enforceable Only]

4) Criteria of Violation/Exceedance for Spill-Containment Receptacles: A reading on a CGD or OVA exceeding 20% LEL (10,000 ppm as methane) is an exceedance.
[Rule 353 §301.3(d)] [Locally Enforceable Only]

b. Fill Pipe Requirements:

i. Submerged Fill Pipe:

1) Each fill-line into a stationary dispensing tank shall be equipped with a permanent submerged fill pipe that has a discharge opening which is completely submerged when the liquid level is 6 inches above the tank bottom.
[Rule 353 §302.1][SIP Rule 353 §301.1]

2) Threads, gaskets, and mating surfaces of the fill pipe assembly shall be designed and maintained tight. There shall be no liquid or vapor leakage at the joints of the assembly.
[Rule 353 §302.1(a)] [Locally Enforceable Only]

ii. Fill Pipe Caps:

1) The cap shall have a securely attached, intact gasket.

2) The cap and its gasket shall always function properly, latch completely so that it cannot then be easily twisted by hand, and have no structural defects.

3) The cap of a gasoline fill pipe shall always be fastened securely on the fill pipe except immediately before, during, and immediately after:

a) "Sticking" the tank to measure gasoline depth

b) Delivering gasoline into the tank

c) Doing testing, maintenance or inspection on the gasoline/vapor system

4) The Permittee shall not unfasten or remove a fill pipe cap unless every other fill pipe is either securely capped or connected to a delivery hose, except as otherwise needed for testing, maintenance, or inspection.
[Rule 353 §302.2] [Locally Enforceable Only]

iii. Multiple Fill Pipes:
A tank installed after December 31, 1998 shall not be equipped with more than one fill pipe. Concurrent delivery of gasoline to a tank with more than 1 fill pipe is prohibited.
[Rule 353 §302.3] [Locally Enforceable Only]

iv. Fill Pipe Obstructions:
No screen and/or other obstructions in fill pipe assemblies shall be allowed unless it is CARB-certified or does not prevent the measurement of how far the end of the fill pipe is from the bottom of the tank (overfill protection flappers are acceptable). Allowed screens and/or other obstructions shall be temporarily removed by the Permittee of a dispensing tank prior to inspection by the Control Officer to allow measurements pursuant to this Permit.
[Rule 353 §302.4] [Locally Enforceable Only]

v. Overfill protection equipment shall be kept vapor tight so that no emissions from the tank can penetrate into the fill-pipe or atmosphere.
[Rule 353 §302.5] [Locally Enforceable Only]

## 24. INSPECTION REQUIREMENTS:

a. The Permittee shall inspect spill containment receptacles weekly for cracks, defects, foreign

material, and spilled gasoline. Records shall be maintained as specified below.

[Rule 353 §301.3(a)(3)] [Locally Enforceable Only]

b. External fittings of the fill pipe assembly shall be inspected weekly to assure that the cap, gasket, and piping are intact and are not loose.

[Rule 353 §302.1(b)] [Locally Enforceable Only]

c. If deliveries are less than weekly, inspection and recording of the inspection at the time of each delivery will be considered an acceptable alternative to the weekly inspection and recordkeeping requirements of the rule.

**25. RECORDKEEPING REQUIREMENTS:**

The Permittee shall keep the following records and supporting information no less than five years from the date of such record:

a. The total amount of gasoline received each month shall be recorded by the end of the following month.

b. Weekly inspection records of the fill pipe and spill containment shall be recorded by the end of Saturday of the following week.

c. Records of the last 12 months of gasoline throughput shall be onsite and readily available within 24 hours of a request by the Control Officer.

[Rule 353 §502] [SIP Rule 353 §502] [40 CFR §§ 63.11111(e)]

**26. SURFACE COATING:** (Note: This does not include architectural coatings which is covered elsewhere in these permit conditions)

If the Permittee engages in any surface coating operations, the Permittee shall comply with all applicable conditions from County Rule 336: Surface Coating Operations.

[County Rule 336] [SIP Rule 336]

**27. ABRASIVE BLASTING WITHOUT BAGHOUSE:**

If the Permittee engages in any abrasive blasting operations, the Permittee shall comply with all applicable requirements of County Rule 312: Abrasive Blasting.

[County Rule 312] [SIP Rule 312]

**28. ARCHITECTURAL COATINGS:**

If any architectural coatings are applied, the Permittee shall comply with all applicable conditions of County Rule 335: Architectural Coatings.

[County Rule 335][SIP Rule 335]

**29. VOLATILE ORGANIC COMPOUNDS:**

The Permittee shall comply with all applicable conditions from County Rule 330: Volatile Organic Compounds.

[County Rule 330] [Locally enforceable only]

**30. SOLVENT CLEANING:**

If the Permittee engages in any solvent cleaning operations, the Permittee shall comply with all applicable conditions of County Rule 331: Solvent Cleaning.

[County Rule 331] [SIP Rule 331]

**31. WIPE CLEANING:**

If the Permittee engages in any wipe cleaning operations, the Permittee shall comply with all applicable conditions from County Rule 331: Solvent Cleaning.

[County Rule 331] [SIP Rule 331]

**32. SPRAY COATING:**

If the Permittee engages in any spray coating operations, the Permittee shall comply with all applicable conditions from County Rule 315: Spray Coating

[County Rule 315] [SIP Rule 315]

**33. CUTBACK AND EMULSIFIED ASPHALT:**

If the Permittee engages in any operations involving cutback and emulsified asphalt, the Permittee shall comply with all applicable conditions from County Rule 340: Cutback and Emulsified Asphalt

[County Rule 340] [SIP Rule 340]

## GENERAL CONDITIONS

**34. AIR POLLUTION PROHIBITED:**

The Permittee shall not discharge from any source whatever into the atmosphere regulated air pollutants which exceed in quantity or concentration that specified and allowed in the County or SIP Rules, the Arizona Administrative Code (AAC) or the Arizona Revised Statutes (ARS), or which cause damage to property or unreasonably interfere with the comfortable enjoyment of life or property of a substantial part of a community, or obscure visibility, or which in any way degrade the quality of the ambient air below the standards established by the Maricopa County Board of Supervisors or the Director of the Arizona Department of Environmental Quality (ADEQ).

[Rule 100 §301] [locally enforceable only]

**35. CIRCUMVENTION:**

The Permittee shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of regulated air pollutants to the atmosphere, conceals or dilutes an emission which would otherwise constitute a violation of this Permit or any Rule or any emission limitation or standard. The Permittee shall not circumvent the requirements concerning dilution of regulated air pollutants by using more emission openings than is considered normal practice by the industry or activity in question.

[Rule 100 §104] [40 CFR 70.6(a)(1)]

**36. CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS:**

Any application form, report, or compliance certification submitted under County or Federal Rules or these Permit Conditions shall contain certification by a responsible official of truth, accuracy, and completeness of the application form or report as of the time of submittal. This certification and any other certification required under County or Federal Rules or these Permit Conditions shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[Rule 100 §401] [Rule 210 §§301.7 & 305.1(e)] [40 CFR 70.5(d)]

**37. COMPLIANCE:**

a. COMPLIANCE REQUIRED:

i. The Permittee shall comply with all conditions of this permit and with all applicable requirements of Arizona air quality statutes and the air quality rules. Compliance with permit terms and conditions does not relieve, modify, or otherwise affect the Permittee's duty to comply with all applicable requirements of Arizona air quality statutes and the Maricopa County Air Pollution Control Regulations. Any permit noncompliance is grounds for enforcement action; for a permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. Noncompliance with any federally enforceable requirement in this Permit constitutes a violation of the Act.

[Rule 210 §§301.8(b)(4) & 302.1(h)(1)] [40 CFR 70.5(c)(8)(i)]

ii. The Permittee shall halt or reduce the permitted activity in order to maintain compliance with applicable requirements of Federal laws, Arizona laws, the County Rules, or other conditions of this Permit. [This Condition is federally enforceable if the condition or requirement itself is federally enforceable and only locally enforceable if the condition or requirement itself is locally enforceable only.]

[Rule 210 §302.1(h)(2)]

iii. For any major source operating in a nonattainment area for any pollutant(s) for which the source is classified as a major source, the source shall comply with reasonably available control technology (RACT) as defined in Rule 100.

[Rule 210 §302.1(h)(6)] [SIP Rule 220 §302.2]

iv. For any major source operating in a nonattainment area designated as serious for $PM_{10}$, for which the source is classified as a major source for $PM_{10}$, the source shall comply with the best available control technology (BACT), as defined in Rule 100 for $PM_{10}$.

[Rule 210 §302.1(h)(7)] [locally enforceable only]

b. COMPLIANCE PLAN:
Based on the certified information contained in the application for this Permit, the facility is in compliance with all applicable requirements in effect as of the first date of public notice of the proposed conditions for this Permit unless a Compliance Plan is included in the Specific Conditions of this Permit. The Permittee shall continue to comply with all applicable requirements and shall meet any applicable requirements that may become effective during the term of this permit on a timely basis.

[Rule 210 §305.1(g)] [40 CFR 70.5(c)(8)]

**38. CONFIDENTIALITY CLAIMS:**

Any records, reports or information obtained from the Permittee under the County Rules or this Permit shall be available to the public, unless the Permittee files a claim of confidentiality in accordance with ARS §49-487(c) that:

a. Precisely identifies the information in the permit(s), records, or reports that is considered confidential, and

b. Provides sufficient supporting information to allow the Control Officer to evaluate whether such information satisfies the requirements related to trade secrets or, if applicable, how the information, if disclosed, could cause substantial harm to the person's competitive position. The claim of confidentiality is subject to the determination by the Control Officer as to whether the claim satisfies these requirements.

A claim of confidentiality shall not excuse the Permittee from providing any and all information required or requested by the Control Officer and shall not be a defense for failure to provide such information.

If the Permittee submits information with an application under a claim of confidentiality pursuant to ARS §49-487 and Rule 200, the Permittee shall submit a copy of such information directly to the Administrator of the USEPA.

[Rule 100 §402] [Rule 200 §411] [Rule 210 §301.5] [40 CFR 70.5(a)(3)]

**39. CONTINGENT REQUIREMENTS:**

*NOTE: This Permit Condition covers activities and processes addressed by the CAA which may or may not be present at the facility.*

a. ASBESTOS:
The Permittee shall comply with the applicable requirements of 40 CFR 61.145 through 61.147 and 61.150 of the National Emission Standard for Asbestos and Rule 370 for all demolition and renovation projects.

[40 CFR Part 61 Subpart M] [Rule 370 §301.9]

b. RISK MANAGEMENT PLAN (RMP):
Should this stationary source, as defined in 40 CFR 68.3, be subject to the accidental release prevention regulations in 40 CFR Part 68, then the Permittee shall submit an RMP by the date specified in Section 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 CFR Part 70. However, neither the RMP nor modifications to the RMP shall be considered to be a part of this Permit.

[40 CFR Part 68]

c. STRATOSPHERIC OZONE PROTECTION:

If applicable, the Permittee shall follow the requirements of 40 CFR 82.100 through 82.124 with respect to the labeling of products using ozone depleting substances.

If applicable, the Permittee shall comply with all of the following requirements with respect to recycling and emissions reductions for Class I and Class II Refrigerants and their substitutes:

i. All Persons opening and disposing of appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

ii. Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR 82.158.

iii. Equipment testing organizations must comply with 40 CFR 82.160.

iv. Persons performing maintenance, service, repair, or disposal of appliances must be certified by a certified technician pursuant to 40 CFR 82.161.

v. Certification requirements of 40 CFR 82.162 and 82.164, as applicable.

vi. Reporting and Recordkeeping requirements in 40 CFR 82.166.

If applicable, the Permittee shall follow the requirements of 40 CFR Part 82 Subpart G, including all Appendices, with respect to the safe alternatives policy on the acceptability of substitutes for ozone-depleting compounds.

[40 CFR Part 82 Subparts E, F, and G]

**40. DUTY TO SUPPLEMENT OR CORRECT APPLICATION:**

If the Permittee fails to submit any relevant facts or has submitted incorrect information in a permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, the Permittee shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a proposed permit.

[Rule 210 §301.6] [40 CFR 70.5(b)]

**41. EMERGENCY EPISODES:**

If an air pollution alert, warning, or emergency has been declared, the Permittee shall comply with any applicable requirements of Rule 600 §302.

[Rule 600 §302] [SIP Rule 600 §302]

**42. EMERGENCY PROVISIONS:**

An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[Rule 130 §201] [40 CFR 70.6(g)]

**43. EXCESS EMISSIONS:**

There are reporting requirements associated with excess emissions. These requirements are contained in Permit Condition 49.f in a subparagraph called Excess Emissions Reporting. The definition of excess emissions can be found in Rule 100 §200.

[Rule 140 §500] [SIP Rule 140]

**44. FEES:**

The Permittee shall pay fees to the Control Officer pursuant to ARS §49-480(D) and Rule 280.

[Rule 200 §409] [Rule 210 §§302.1(i) and §401] [40 CFR 70.9(a)]

**45. MODELING:**

The Permittee shall perform the modeling in a manner consistent with the 40 CFR 51, Appendix W, "Guideline on Air Quality Models". Except for minor New Source Review, the Permittee shall perform air quality impact modeling in a manner consistent with "MCAQD Minor New Source Review Air Dispersion Modeling Guideline". Where the person can demonstrate that an air quality impact model specified in the guideline is inappropriate, the model may be modified or another model substituted if found to be acceptable to the Control Officer.

[40 CFR 51 App. W] [Rule 200 §407]

**46. MONITORING AND TESTING:**

a. MONITORING REQUIRED: The Permittee shall monitor, sample, or perform other studies to quantify emissions of regulated air pollutants or levels of air pollution that may reasonably be attributable to the facility if required to do so by the Control Officer, either by Permit or by order in accordance with Rule 200 §310.

[Rule 200 §310] [40 CFR 70.6(a)(3)]

b. TESTING REQUIRED: Except as otherwise specified in these Permit Conditions or by the Control Officer, the Permittee shall conduct required testing used to determine compliance with standards or permit conditions established pursuant to the County or SIP Rules or these Permit Conditions in accordance with Rule 270 and the applicable testing procedures contained in the Arizona Testing Manual for Air Pollutant Emissions or other approved USEPA test methods.

[Rules 200 §408; 210 §302.1.(c); and Rule 270 §§300 and 400] [40 CFR 70.6(a)(3)]

c. TESTING FACILITIES: The Permittee shall provide, or cause to be provided, performance testing facilities as follows:

i. Sampling ports adequate for test methods applicable to such source.

ii. Safe sampling platform(s).

iii. Safe access to sampling platforms(s).

iv. Utilities for sampling and testing equipment.

[Rule 270 §405] [locally enforceable only]

**47. PERMITS:**

a. BASIC:

This Permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any Permit Condition.

[Rule 210 §302.1(h)(3)] [40 CFR 70.7(f)]

b. PERMITS AND PERMIT CHANGES, AMENDMENTS AND REVISIONS:

i. The Permittee shall comply with the Administrative Requirements of Section 400 of Rule 210 for all changes, amendments and revisions at the facility for any source subject to regulation under Rule 200, shall comply with all required time frames, and shall obtain any required preapproval from the Control Officer before making changes. All applications shall be filed in the manner and form prescribed by the Control Officer. The application shall contain all the information necessary to enable the Control Officer to make the determination to grant or to deny a permit or permit revision including information listed in Rule 200 §309 and Rule 210 §301.

[Rule 200 §§301 & 309] [Rule 210 §§301 & 400] [40 CFR 70.7(e)]

ii. The Permittee shall supply a complete copy of each application for a permit, a minor permit

revision, or a significant permit revision directly to the Administrator of the USEPA. The Control Officer may require the application information to be submitted in a computer-readable format compatible with the Administrator's national database management system.
[Rule 210 §§303.1(a) & 303.2] [locally enforceable only]

iii. While processing an application, the Control Officer may require the applicant to provide additional information and may set a reasonable deadline for a response. If, while processing an application that has been determined or deemed to be complete, the Control Officer determines that additional information is necessary to evaluate or to take final action on that application, the Control Officer may request such information in writing and may set a reasonable deadline for a response.
[Rule 210 §301.4(f)] [40 CFR 70.5(a)(2)]

iv. No permit revision shall be required pursuant to any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
[Rule 210 §302.1(j)] [40 CFR 70.6(a)(8)]

c. POSTING:

i. The Permittee shall keep a complete permit clearly visible and accessible on the site where the equipment is installed.
[Rule 200 §312] [locally enforceable only]

ii. Any approved Dust Control Plan or Dust Control Permit required by Rule 310 shall be posted in a conspicuous location at the work site, within on-site equipment, or in an on-site vehicle, or shall otherwise be kept available on site at all times.
[Rule 310 §409] [SIP Rule 310 §409]

d. PROHIBITION ON PERMIT MODIFICATION:
The Permittee shall not willfully deface, alter, forge, counterfeit, or falsify this permit.
[Rule 200 §311] [locally enforceable only]

e. RENEWAL:

i. The Permittee shall submit an application for the renewal of this Permit in a timely and complete manner. The Permittee shall file all permit applications in the manner and form prescribed by the Control Officer. For purposes of permit renewal, a timely application is one that is submitted at least six months, but not more than 18 months, prior to the date of permit expiration. A complete application shall contain all of the information required by the County Rules including Rule 200 §309 and Rule 210 §§301 & 302.3.
[Rule 200 §309] [Rule 210 §§301 and 302] [40 CFR 70.7(c)]

ii. If the Permittee submits a timely and complete application for a permit renewal, but the Control Officer has failed to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the renewal permit has been issued or denied. This protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit, by the deadline specified in writing by the Control Officer, any additional information identified as being needed to process the application.
[Rule 200 §403.2] [Rule 210 §§301.4(f) and 301.9] [40 CFR 70.7(c)(1)(ii)]

f. REVISION / REOPENING / REVOCATION:

i. If the Permittee becomes subject to a standard promulgated by the Administrator under Section 112(d) of the CAA, the Permittee shall, within 12 months of the date on which the standard was promulgated, submit an application for a permit revision demonstrating how

the source will comply with the standard.

[Rule 210 §301.2(c)] [locally enforceable only]

ii. This permit shall be reopened and revised to incorporate additional applicable requirements adopted by the Administrator pursuant to the CAA that become applicable to the facility if this permit has a remaining permit term of three or more years and the facility is a major source. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this Permit is due to expire unless the original permit or any of its terms have been extended pursuant to Rule 200 §403.2.

[Rule 200 §402.1(a)(1)] [40 CFR 70.7(f)(1)(i)]

Any permit revision required pursuant to this Permit Condition, 47.f.ii, shall reopen the entire permit, shall comply with provisions in Rule 200 for permit renewal, and shall reset the five year permit term.

[Rule 200 §402.1(a)(1)] [Rule 210 §302.5] [locally enforceable only]

iii. This permit shall be reopened and revised under any of the following circumstances:

1) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Title V permit.

2) The Control Officer or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

3) The Control Officer or the Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

Proceedings to reopen and issue a permit under this Permit Condition, 47.f.iii, shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the Permit for which cause to reopen exists.

[Rule 200 §402.1] [40 CFR 70.7(f)]

iv. This permit shall be reopened by the Control Officer and any permit shield revised when it is determined that standards or conditions in the permit are based on incorrect information provided by the applicant.

[Rule 210 §407.3] [locally enforceable only]

g. REQUIREMENTS FOR A PERMIT:

i. Except as noted in Sections 403 and 405 of County Rule 210, no source may operate after the time that it is required to submit a timely and complete application, except in compliance with a permit issued under Rule 210. Permit expiration terminates the Permittee's right to operate. However, if a source submits a timely and complete application, as defined in Rule 210 §301.4, for permit issuance or renewal, the source's failure to have a permit is not a violation of the County Rules until the Control Officer takes final action on the application. The Source's ability to operate without a permit as set forth in this paragraph shall be in effect from the date the application is determined to be complete until the final permit is issued. This protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit, by the deadline specified in writing by the Control Officer, any additional information identified as being needed to process the application.

[Rule 210 §301.9] [locally enforceable only]

ii. A subcontractor who is engaged in dust-generating operations at a site that is subject to a

Dust Control Permit shall register with the Control Officer and follow those registration requirements in Rule 200.

[Rule 200 §§306 & 307] [SIP Rule 310 §302]

iii. Burn Permit: The Permittee shall obtain a Permit To Burn from the Control Officer before conducting any open outdoor fire except for the activities listed in Rule 314 §303.

[Rule 314] [Rule 200 §308] [SIP Rule 314]

h. RIGHTS AND PRIVILEGES:
This Permit does not convey any property rights nor exclusive privilege of any sort.

[Rule 210 §302.1(h)(4)] [40 CFR 70.6(a)(6)(iv)]

i. SEVERABILITY:
The provisions of this Permit are severable, and, if any provision of this Permit is held invalid, the remainder of this Permit shall not be affected thereby.

[Rule 210 §302.1(g)] [40 CFR 70.6(a)(5)]

j. SCOPE:
The issuance of any permit or permit revision shall not relieve the Permittee from compliance with any Federal laws, Arizona laws, or the County or SIP Rules, nor does any other law, regulation or permit relieve the Permittee from obtaining a permit or permit revision required under the County Rules.

[Rule 200 §309] [locally enforceable only]

Nothing in this permit shall alter or affect the following:

i. The provisions of Section 303 of the Act, including the authority of the Administrator pursuant to that section.

ii. The liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

iii. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act.

iv. The ability of the Administrator of the USEPA or of the Control Officer to obtain information from the Permittee pursuant to Section 114 of the Act, or any provision of State law.

v. The authority of the Control Officer to require compliance with new applicable requirements adopted after the permit is issued.

[Rule 210 §407.2] 40 CFR 70.6(f)(3)]

k. TERM OF PERMIT:
This Permit shall remain in effect for no more than 5 years from the date of issuance.

[Rule 210 §§302.1(a) & 402] [40 CFR 70.6(a)(2)]

l. TRANSFER:
Except as provided in ARS §49-429 and Rule 200, this permit may be transferred to another person if the Permittee gives notice to the Control Officer in writing at least 30 days before the proposed transfer and complies with the permit transfer requirements of Rule 200 and the administrative permit amendment procedures pursuant to Rule 210.

[Rule 200 §404] [Rule 210 §404] 40 CFR 70.7(d)(1)(iv)]

## 48. RECORDKEEPING:

a. RECORDS REQUIRED:
The Permittee shall maintain records of all emissions testing and monitoring, records detailing all malfunctions which may cause any applicable emission limitation to be exceeded, records

detailing the implementation of approved control plans and compliance schedules, records required as a condition of any permit, records of materials used or produced and any other records relating to the emission of air contaminants which may be requested by the Control Officer.

[Rule 100 §501] [40 CFR 70.6(a)(3)(ii)]

b. RETENTION OF RECORDS:
Unless a longer time frame is specified by the Rules or these Permit Conditions, the Permittee shall retain information and records required by either the Control Officer or these Permit Conditions as well as copies of summarizing reports recorded by the Permittee and submitted to the Control Officer for 5 years after the date on which the pertinent report is submitted.

[Rule 100 §504] [40 CFR 70.6(a)(3)(ii)(B)]

c. MONITORING RECORDS:
The Permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings or physical records for continuous monitoring instrumentation, and copies of all reports required by the permit. Records of any monitoring required by this Permit shall include the following:

i. The date, place as defined in the permit, and time of sampling or measurements;

ii. The date(s) analyses were performed;

iii. The company or entity that performed the analyses;

iv. The analytical techniques or methods used;

v. The results of such analyses; and

vi. The operating conditions as existing at the time of sampling or measurement.

[Rule 210 §§302.1(d) and 305.1(b)] [40 CFR 70.6(a)(3)(ii)(C)(ii)(A)]

d. RIGHT OF INSPECTION OF RECORDS:
When the Control Officer has reasonable cause to believe that the Permittee has violated or is in violation of any provision of Rule 100 or any County Rule adopted under Rule 100, or any requirement of this permit, the Control Officer may request, in writing, that the Permittee produce all existing books, records, and other documents evidencing tests, inspections, or studies which may reasonably relate to compliance or noncompliance with County Rules adopted under Rule 100. No person shall fail nor refuse to produce all existing documents required in such written request by the Control Officer.

[Rule 100 §106] [40 CFR 70.6(c)]

**49. REPORTING:**

*NOTE: See Permit Condition 36in conjunction with reporting requirements.*

a. ANNUAL EMISSION INVENTORY REPORT:
Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall complete and shall submit to the Control Officer an annual emissions inventory report. The report is due by April 30 or 90 days after the Control Officer makes the inventory forms available, whichever occurs later. The annual emissions inventory report shall be in the format provided by the Control Officer. The Control Officer may require submittal of supplemental emissions inventory information forms for air contaminants under ARS §49-476.01 and ARS §49-480.03.

[Rule 100 §505] [SIP Rule 100 §500]

b. DATA REPORTING:

When requested by the Control Officer, the Permittee shall furnish information to locate and classify air contaminant sources according to type, level, duration, frequency and other characteristics of emissions and such other information as may be necessary. This information shall be sufficient to evaluate the effect on air quality and compliance with the County or SIP Rules. The Permittee may be required to submit annually, or at such intervals specified by the Control Officer, reports detailing any changes in the nature of the source since the previous report and the total annual quantities of materials used or air contaminants emitted.

[Rule 100 §502] [SIP Rule 100 §500]

c. DEVIATION REPORTING:

The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions. Unless specified otherwise elsewhere in these Permit Conditions, an upset for the purposes of this Permit Condition shall be defined as the operation of any process, equipment or air pollution control device outside of either its normal design criteria or operating conditions specified in this Permit and which results in an exceedance of any applicable emission limitation or standard.

i. For emissions in excess of permit requirements, the Permittee shall notify the Control Officer by email, telephone, or facsimile within 24 hours of knowledge of the deviation. A detailed written deviation report shall be submitted within 72 hours of the notification.

ii. All other deviations that do not result in an exceedance of any applicable emission limitation or standard shall be documented in the same manner, promptly logged in the facility records within 2 working days and included in the next semiannual monitoring report.

The report and documentation in the log shall contain a description of the probable cause of such deviations and any corrective actions or preventive measures taken. In addition, the Permittee shall report within a reasonable time any long-term corrective actions or preventive actions taken as the result of any deviations from permit requirements if applicable. All instances of deviations from the requirements of this Permit shall be clearly identified in the semiannual monitoring reports.

[Rule 210 §§302.1(e)] [Rule 140 §500] [SIP Rule 140]

d. EMERGENCY REPORTING:

The Permittee shall, as soon as possible, telephone the Control Officer giving notice of the emergency and submit notice of the emergency to the Control Officer by certified mail, facsimile, or hand delivery within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[Rule 130 §402.4] [40 CFR 70.6(g)]

e. EMISSION STATEMENTS REQUIRED AS STATED IN THE ACT:

Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall provide the Control Officer with an annual emission statement, in such form as the Control Officer prescribes, showing measured actual emissions or estimated actual emissions. At a minimum the emission statement shall contain all information required by the Consolidated Emissions Reporting Rule in 40 CFR Part 51, Subpart A, Appendix A, Table 2A. The statement shall contain emissions for the time period specified by the Control Officer. The statement shall also contain a certification by a responsible official of the company that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement.

[Rule 100 §503] [SIP Rule 100 §500]

f. EXCESS EMISSIONS REPORTING:

(NOTE: This reporting subsection is associated with the specific requirement listed in Permit Condition 43 entitled "Excess Emissions".)

i. The Permittee shall report to the Control Officer any emissions in excess of the limits established either by the County or SIP Rules or these Permit Conditions. The report shall be in two parts as specified below:

1) Notification by email, telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions. This notification shall include all available information listed in Permit Condition 49.f.ii.

2) A detailed written notification of an excess emissions report shall be submitted within 72 hours of the telephone notification in Permit Condition 49.f.i.1).

ii. The excess emissions report shall contain the following information:

1) The identity of each stack or other emission point where the excess emissions occurred.

2) The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions.

3) The time and duration or expected duration of the excess emissions.

4) The identity of the equipment from which the excess emissions emanated.

5) The nature and cause of such emissions.

6) The steps taken if the excess emissions were the result of a malfunction to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction.

7) The steps that were or are being taken to limit the excess emissions.

8) If this Permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, the report shall contain a list of the steps taken to comply with the permit procedures.

iii. In the case of continuous or recurring excess emissions, the notification requirements of this section shall be satisfied if the Permittee provides the required notification after excess emissions are first detected and includes in the notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification that meets the criteria of this Permit Condition.

[Rule 140 §500] [SIP Rule 140]

g. OTHER REPORTING:
The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for revising, revoking and reissuing this permit, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by this Permit. For information claimed to be confidential, the Permittee shall furnish a copy of such records directly to the Administrator along with a claim of confidentiality pursuant to Permit Condition 38.

[Rule 210 §302.1(h)(5)] [40 CFR 70.6(a)(6)(v)]

**50. RIGHT TO ENTRY AND INSPECTION OF PREMISES:**

a. The Control Officer during reasonable hours, for the purpose of enforcing and administering

County or SIP Rules or the Clean Air Act, or any provision of the Arizona Revised Statutes relating to the emission or control prescribed pursuant thereto, may enter every building, premises, or other place, except the interior of structures used as private residences. Every person is guilty of a petty offense under ARS §49-488 who in any way denies, obstructs or hampers such entrance or inspection that is lawfully authorized by warrant.

b. The Permittee shall allow the Control Officer or his authorized representative, upon presentation of proper credentials and other documents as may be required by law, to:

i. Enter upon the Permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept pursuant to the conditions of the permit;

ii. Have access to and copy, at reasonable times, any records that are required to be kept pursuant to the conditions of the permit;

iii. Inspect, at reasonable times, any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required pursuant to this permit;

iv. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and

v. Record any inspection by use of written, electronic, magnetic, and photographic media.

[Rule 100 §105] [Rule 210 §305.1(f)] [40 CFR 70.6(c)(2)]

# APPENDIX A

## EQUIPMENT LIST

### West Phoenix Power Plant
### Permit Number V95-006

| | Manufacturer | Serial Number | Model | Rated Capacity | Installed | Operational | Controls | CEMS | PNG[1] |
|---|---|---|---|---|---|---|---|---|---|
| **Combined Cycle 1** | | | | | Apr-75 | Jun-76 | n/a | | x |
| Combustion Turbine | General Electric | 237989 | 7001C | 57 mw | | | | | |
| Steam Turbine | General Electric | 197660 | | 28 mw | | | | | |
| **Combined Cycle 2** | | | | | Apr-75 | Jun-76 | n/a | | x |
| Combustion Turbine | General Electric | 237988 | 7001C | 57 mw | | | | | |
| Steam Turbine | General Electric | 197659 | | 28 mw | | | | | |
| **Combined Cycle 3** | | | | | Apr-75 | Jun-76 | SCR | | x |
| Combustion Turbine | General Electric | 237987 | 7001C | 57 mw | | | | x $NO_x$, $O_2$, and CO | |
| Steam Turbine | General Electric | 197658 | | 28 mw | | | | | |
| **Combined Cycle 4** | | | | | Jul-00 | Sep-01 | Oxidation Catalyst | x $NO_x$, $O_2$, and CO | x |
| Combustion Turbine | General Electric | 297538 | 7001EA | 73.4 mw | | | Dry low-$NO_x$ | | |
| Steam Turbine | Dresser Rand | D-4940 | | 44.6 mw | | | | | |
| Auxiliary Duct Burner | Peabody | | | 40 (MMBtu/hr) | | | | | |
| **Combined Cycle 5** | | | | | Sep-01 | Aug-02 | Oxidation Catalyst | x $NO_x$, $O_2$, and CO | x |
| Combustion Turbine | Siemens Westinghouse | 37A8408 | 501F | 175 mw | | | Dry low-$NO_x$ | | |
| Combustion Turbine | Siemens Westinghouse | 37A8409 | 501F | 175 mw | | | SCR | $NO_x$, $O_2$, and CO | |
| Steam Turbine | Siemens | T10356 | | 192 mw | | | | | |
| Auxiliary Duct Burner | Copes | | | 240 (MMBtu/hr) | Sep-01 | Aug-02 | | | |
| Auxiliary Duct Burner | Copes | | | 240 (MMBtu/hr) | Sep-01 | Aug-02 | | | |

| | Manufacturer | Serial Number | Model | Rated Capacity | Installed | Operational | Controls | CEMS | PNG[1] |
|---|---|---|---|---|---|---|---|---|---|
| **Simple Cycle 1** Combustion Turbine No.1 | Westinghouse | 17A5038 | 501-AA | 55 mw | 1972 | May-72 | n/a | | x |
| **Simple Cycle 1** Combustion Turbine No.2 | Westinghouse | 17A5058 | 501-AA | 55 mw | 1972 | Jul-73 | n/a | | x |
| **Cooling Tower (CC1, 2 ,3)** | PVC Cellular | 653-12-167-74 | 653-4-06 | 90,000 | Apr-75 | Jun-76 | n/a | | |
| **Cooling Tower (CC4)** | Marley | 164804-664-4-3-00 | 664-4-3 | 40,000 gpm | Jul-00 | Sep-01 | n/a | | |
| **Cooling Tower (CC5)** | Marley | 50-ECT001 | TU12C | 140,000 gpm | Sep-01 | Aug-02 | n/a | | |
| **Auxiliary Boilers** | | | | | | | | | |
| **ZLD Boiler** | Clayton | 25126 | SEG304-1-FMB | 11.8 (MMBtu/hr) | Jul-12 | Aug-12 | Dry low-$NO_x$ | | x |

[1] PNG = Pipeline Natural Gas

**Electricity generating units:**

Combined Cycle (CC) Units 1, 2 and 3
Three 85 MW each combined cycle units placed into commercial operation June, 1976, each consisting of:
Combustion turbine, General Electric model 7001C with a 17 stage compressor rated at 57MW;
Steam Turbine, General Electric, single flow, straight condensing, non-reheat, rated at 28 MW.
Heat Recovery Steam Generator, extended-tube, forced circulation, with 146,667 kva generator.
CC3 SCR Manufactured by Ceram

Combustion Units #1 & 2:
Two 55 MW each simple cycle gas turbine generating units placed into commercial operation in 1972 ( Unit #1) and 1973 ( Unit #2) consisting of :
Westinghouse W-501-AA Turbine (17 stage axial flow compressor, 4 stage power turbine), and Generator ( air cooled 62,500kva, 13,800 stator volts, 3600 rpm).

CC5 – each turbine – 1,808 MMBtu/hr heat input and 175 MW turbine output, CC5 Duct Burners – each burner – 240 MMBtu/hr heat input
CC5 Oxidation Catalyst – Johnson Matthey

CC5 SCR - Peerless / Cormetech
CC4 turbine – 944.4 MMBtu/hr heat input and 80.3 Mw turbine output
CC4 Duct Burner – 40 MMBtu/hr heat input
CC4 Oxidation Catalyst Manufactured by Goal Line / Emerachem

**Auxiliary Boiler**

Clayton boiler model SEG304-1-FMB, 11.8 MMBtu/hr, burns natural gas, equipped with dry low-$NO_x$ burners.

**Cooling towers:**

Cooling Tower (CC1, 2 &3), PVC Cellular 30,000 gpm with a cellular design drift eliminator, installed in 1975.
Cooling Tower (CC4) manufactured by Marley Model 664-4-3, 42,000 gpm with a cellular design drift eliminator, installed in 2000.
Cooling Tower (CC5) – Marley Model #TU12C,140,000 gpm capacity

**Gasoline Storage Tanks**:

One 2000-gallon unleaded gasoline storage tank.

## EQUIPMENT EXEMPT FROM OBTAINING THE PERMIT:

**Fuel Oil Storage Tanks:**

Five, 100K bbls each, fuel oil storage tank
One 30K bbls fuel oil storage tank.
One 2000 gal. diesel storage tank (Used for storing vehicle fuel)

**Abrasive Blasting Units**

Two self-contained abrasive blasting units with exhaust.

# West Phoenix Power Plant

# Permit Number V95-006

## APPENDIX B: PERMIT SHIELD APPLICABLE REQUIREMENTS

Identified below are all federal, state and local air pollution control requirements applicable to the Permittee at the time the permit is issued. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance included in the Appendix B "Permit Shield" of this permit.

For each part, subpart, section, and subsection reference listed, all subsequent sections are assumed applicable. All other subparts or sections not listed are not applicable.

### County Requirements

### Maricopa County

### Air Pollution Control Regulations

**Regulation I General Provisions**

| **Rule 100** | | **General Provisions and Definitions (2/3/16 revision)** |
|---|---|---|
| | §104 | Circumvention |
| | §105 | Right of Inspection of Premises |
| | §106 | Right of Inspection of Records |
| | § 301 | Air Pollution Prohibited |
| | § 501 | Reporting Requirements |
| | § 502 | Data Reporting |
| | § 503 | Emission Statements Required as Stated in the Act |
| | § 504 | Retention of Records |
| | § 505 | Annual Emissions Inventory Report |

| **Rule 130** | | **Emergency Provisions (7/26/00 revision)** |
|---|---|---|
| | §400 | Administrative Requirements |

| Rule 140 | | Excess Emissions (9/5/01 revision) |
|---|---|---|
| | §400 | Administrative Requirements |
| | §500 | Monitoring and Records |

**Regulation II Permits and Fee**

| Rule 200 | | Permit Requirements (2/3/16 revision) |
|---|---|---|
| | § 301 | Permits Required |
| | § 302 | Title V Permit |
| | § 306 | Dust Control Permit |
| | § 307 | Subcontractor Registration |
| | § 308 | Permit to Burn |
| | § 309 | Standards for Applications |
| | § 311 | Prohibition – Permit Modification |
| | § 312 | Permit Posting Required |
| | § 408 | Testing Procedures |
| | § 409 | Permit Fees |

| Rule 210 | | Title V Permit Provisions (2/3/16 revision) |
|---|---|---|
| | § 302 | Permit Contents |
| | § 305 | Compliance Plan; Certification |
| | § 400 | Administrative requirements |
| | § 401 | Fees Required |
| | § 402 | Permit Term |
| | § 403 | Source Changes Allowed Without Permit Revisions |
| | § 404 | Administrative Permit Amendments |

| **Rule 210** | | **Title V Permit Provisions (2/3/16 revision)** |
|---|---|---|
| | § 405 | Minor Permit Revisions |
| | § 406 | Significant Permit Revisions |
| | § 407 | Permit Shields |

| **Rule 240** | | **Permits For New Major Sources And Major Modifications To Existing Major Sources (2/3/16 revision)** |
|---|---|---|
| | § 304 | Requirements for Non-attainment Areas |
| | § 305 | Requirements for Attainment Areas |

| **Rule 241** | | **Minor New Source Review (NSR) (2/3/16 revision)** |
|---|---|---|
| | § 304 | Best Available Control Technology (BACT) Required |
| | § 305 | Reasonably Available Control Technology (RACT) Required |

| **Rule 270** | | **Performance Tests (11/15/93 revision)** |
|---|---|---|
| | § 300 | Standards |
| | § 301 | Performance Tests Required (approved test methods) |
| | §301.1 | Applicable Procedures and Testing Methods |
| | § 301.2 | Opacity determined by Reference Method 9 of the AZ Testing Manual |
| | § 400 | Administrative requirements |
| | § 401 | Performance Tests Required |
| | § 402 | Testing Criteria |
| | § 403 | Testing Conditions |
| | § 404 | Notice of Testing |
| | § 405 | Testing Facilities Provided |

| **Rule 270** | | **Performance Tests (11/15/93 revision)** |
|---|---|---|
| | § 406 | Minimum Testing Required |
| | § 407 | Compliance with the Emission Limits |
| | § 408 | Additional Testing |

| **Rule 280** | | **Fees (5/26/10 revision)** |
|---|---|---|
| | § 301 | Title V Permit Fees |

**Regulation III Control of Air Contaminants**

| **Rule 300** | | **Visible Emissions (3/12/08 revision)** |
|---|---|---|
| | § 301 | Limitations – Opacity/General: Opacity $\leq$ 20% |
| | § 302 | Exceptions |
| | § 501 | Compliance Determination – Opacity |

| **Rule 310** | | **Fugitive Dust from Dust Generating Operations (1/27/10 revision)** |
|---|---|---|
| | § 301 | General Requirements for Dust Generating Operations |
| | §302 | Permit Requirements for Dust Generating Operations |
| | § 303 | Visible Emissions Requirements for Dust-Generating Operations |
| | § 304 | Stabilization Requirements for Dust-Generating Operations |
| | § 306 | Trackout, Carry-Out , Spillage, and/or Erosion |
| | § 308 | Project Information Sign for Dust-Generating Operations |
| | § 401 | Dust Control Permit Requirements |
| | § 402 | Dust Control Plan Requirements |
| | § 501 | Compliance Determination |

| **Rule 310** | | **Fugitive Dust from Dust Generating Operations (1/27/10 revision)** |
|---|---|---|
| | § 502 | Recordkeeping |
| | § 503 | Records Retention |
| | § 504 | Test Methods Incorporated by Reference |

| **Rule 312** | | **Abrasive Blasting (7/2/03 revision)** |
|---|---|---|
| | § 301 | Limitations |
| | § 302 | Requirements for Unconfined Blasting |
| | § 303 | Requirements for Confined Blasting |
| | § 305 | Opacity Limitation |
| | § 306 | Wind Event |
| | § 501 | Recordkeeping and Reporting |
| | § 502 | Records Retention |
| | § 503 | Opacity Observations |
| | § 504 | Test Methods |

| **Rule 314** | | **Open Outdoor Fires and Indoor Fireplaces at Commercial and Institutional Establishments (7/25/12 revision)** |
|---|---|---|
| | § 301 | Prohibition – Open Outdoor Fires |
| | § 303 | Open Outdoor Fires not Required to Obtain a Burn Permit |

| **Rule 315** | | **Spray Coating Operations (11/17/99 revision)** |
|---|---|---|
| | § 302 | Exemptions |
| | § 501 | Test Methods |

| **Rule 320** | | **Odors and Gaseous Air Contaminants (7/2/03 revision)** |
|---|---|---|
| | § 300 | Standards |
| | § 302 | Material Containment Required |
| | § 303 | Stack height |
| | § 304 | Limitation – Hydrogen Sulfide |
| | § 305 | Permit Conditions – High Sulfur Oil |
| | § 306.1 | Steam Plants Using Low Sulfur Oil – After May 30, 1972 |
| | § 308 | Limitation – Nitrogen Oxides from Electrical Power Plants |

| **Rule 322** | | **Power Plant Operations (10/17/07 revision)** |
|---|---|---|
| | § 104 | Partial Exemptions |
| | § 220 | Natural Gas Curtailment |
| | § 301 | Limitations – Particulate Matter |
| | § 302 | Limitations – Opacity |
| | § 303 | Limitations – Sulfur in Fuel |
| | § 304 | Limitations – Nitrogen Oxides |
| | § 305 | Limitations – Carbon Monoxide |
| | § 307 | Emergency Fuel Use Notification |
| | § 500 | Monitoring and Records |

| **Rule 323** | | **Fuel Burning Equipment From Industrial/Commercial/Institutional (ICI) Sources (10/17/07 revision)** |
|---|---|---|
| | § 301 | Limitations – Particulate Matter |
| | § 302 | Limitations – Opacity |
| | § 303 | Limitations – Sulfur in Fuel |

| **Rule 323** | | **Fuel Burning Equipment From Industrial/Commercial/Institutional (ICI) Sources (10/17/07 revision)** |
|---|---|---|
| | § 304 | Limitations – Nitrogen Oxides |
| | § 305 | Limitations – Carbon Monoxide |
| | § 500 | Monitoring and Records |
| | § 501 | Recordkeeping and Reporting |
| | § 503 | Compliance Determination |

| **Rule 330** | | **Volatile Organic Compounds (9/25/13 revision)** |
|---|---|---|
| | § 302 | Limits/Non-Complying Solvents, |
| | § 305 | Equipment Cleanup |
| | § 306 | VOC Containment and Disposal |
| | § 307.2 | Exemptions |
| | § 502 | Determination of Compliance |
| | § 503.1 | Recordkeeping and Reporting |
| | § 503.2 | Recordkeeping and Reporting |
| | § 503.4 | Recordkeeping and Reporting |
| | § 504 | Test Methods |

| **Rule 331** | | **Solvent Cleaning (9/25/13 revision)** |
|---|---|---|
| | § 301 | Solvent Handling Requirements |
| | § 302 | Equipment Requirements for All Cleaning Machines |
| | § 303 | Operating & Signage Requirements |
| | § 304 | Non-Vapor Cleaning/Degreasing |
| | § 305 | Non-Vapor Batch Cleaning Machines |

| **Rule 331** | | **Solvent Cleaning (9/25/13 revision)** |
|---|---|---|
| | § 501 | Recordkeeping and Reporting |
| | § 502 | Compliance Determination and Test Methods |

| **Rule 335** | | **Architectural Coatings (9/25/13 revision)** |
|---|---|---|
| | § 301 | Prohibition – Bituminous Pavement Sealers |
| | § 302 | Interim Limits Non-Flat Architectural Coatings |
| | § 303 | Final Limits – Non-Flat Architectural Coatings |
| | § 304 | Limits – Flat Architectural Coatings |
| | § 305 | Limits – Specialty Coating |
| | § 306 | Exemptions – Specific Use Coatings |
| | § 307 | Exemption – Small Containers |
| | § 401 | Labeling Required |
| | § 402 | Manufacture Date Required |
| | § 500 | Monitoring and Records |

| **Rule 336** | | **Surface Coating Operations (9/25/13 revision)** |
|---|---|---|
| | § 301 | Surface Coatings |
| | § 302 | Application Methods for Surface Coatings |
| | § 303 | Cleanup of Application Equipment |
| | § 304 | Handling and Disposal of VOC |
| | § 305 | Exemptions |
| | § 500 | Monitoring and Records |
| | § 501 | Recordkeeping and Reporting |

| **Rule 340** | | **Cutback and Emulsified Asphalt (9/25/13 revision)** |
|---|---|---|
| | § 301 | Limitations |
| | § 302.1 | Exemptions |
| | § 302.3 | Exemptions |
| | § 303 | Labeling |
| | § 500 | Monitoring and Records |
| | § 501 | Recordkeeping and Reporting |
| | § 502 | Compliance Determination - Test Methods |

| **Rule 353** | | **Gasoline in Stationary Dispensing Tanks (9/25/13 revision)** |
|---|---|---|
| | § 301 | Basic Tank Integrity |
| | § 302 | Fill Pipe Requirements |
| | § 303 | Vapor Recovery System |
| | § 304 | Equipment Maintenance and Use Required |
| | § 305 | Exemptions |
| | § 500 | Monitoring and Records |
| | § 502 | Recordkeeping |
| | § 503 | Compliance Determination |
| | § 504 | Test Methods |

| **Rule 360** | | **New Source Performance Standards (11/18/15 revision)** |
|---|---|---|
| | § 301 | Adopted Federal Standards |
| | § 301 | Subpart A – General Provisions |

| **Rule 360** | | **New Source Performance Standards (11/18/15 revision)** |
|---|---|---|
| | § 301 | Subpart Db – Standards of Performance for Electric Utility Steam Generating Units for Which Construction Commenced After September 18, 1978 |
| | § 301 | Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units |
| | § 301 | Subpart Dc - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units |
| | § 301 | Subpart GG – Standard of Performance for Stationary Gas Turbines |

| **Rule 370** | | **Federal Hazardous Air Pollutant Program (11/18/15 revision)** |
|---|---|---|
| | §301.9 | Subpart M - Asbestos NESHAP |

| **Rule 371** | | **Acid Rain (11/18/15 revision)** |
|---|---|---|
| | § 301 | Incorporated Subparts of the Federal Acid Rain Regulations |

| **Rule 500** | | **Attainment Area Classification (2/3/16 revision)** |
|---|---|---|
| | § 300 | Standards |

| **Rule 510** | | **Air Quality Standards (2/3/26 revision)** |
|---|---|---|
| | § 300 | Standards |

**Regulation VI Emergency Episodes**

| **Rule 600** | | **Emergency Episodes (2/3/16 revision)** |
|---|---|---|
| | § 302 | Control Actions |

Appendices

| Appendix C | | Fugitive Dust Test Methods (3/26/08 revision) |
|---|---|---|
| | Section 2 | Test Methods for Stabilization |
| | Section 3 | Visual Determination of Opacity of Emissions from Dust-Generating Operations |

## State Requirements

## Arizona Administrative Code

(Applicable in Maricopa County; ARS § 49-106)

| | |
|---|---|
| R18-2-703.C.1<br>(R9-3-503.C.1)<br>(Steam Generating Units over 73 MW) | For steam generating units having a heat input rate of 4200 million BTU per hour or less, the maximum allowable particulate emissions rate in pounds-mass per hour<br>$E = 1.02Q^{0.769}$<br>where: Q = heat input in million BTU per hour. |

Applies only to Existing Unit K-2. Duct Burner K-7 is a New Source Performance Standard (NSPS) Unit and not subject to this AAC regulation (per the definition of "existing source", R18-2-101.38).

| | |
|---|---|
| R18-2-719.C.1<br>(R9-3-519.C.1)<br>(Rotating Machinery) | For stationary rotating machinery having a heat input rate of 4200 million BTU per hour or less, the maximum allowable particulate emissions rate in pounds-mass per hour<br>$E = 1.02Q^{0.769}$<br>where: Q = heat input in million BTU per hour. |

Applies only to the Diesel Fire Pump Engines, Existing Units K-4, K-5, and K-6. Gas Turbine K-7 is a New Source Performance Standard (NSPS) Unit and not subject to this AAC regulation (per the definition of "existing source", R18-2-101.38).

| | |
|---|---|
| R18-2-724.C.1<br>(R9-3-524.C.1)<br>(Steam Generating Units less than 73 MW) | For steam generating units having a heat input rate of 4200 million BTU per hour or less, the maximum allowable particulate emissions rate in pounds-mass per hour<br>$E = 1.02Q^{0.769}$<br>where: Q = heat input in million BTU per hour. |

Applies only to Existing Unit K-1.

Federal Requirements

**New Source Performance Standards General Provisions**

**(40 CFR Part 60 Subpart A)**

| | |
|---|---|
| § 60.4(a), (b)(D) | Address |
| § 60.7(a), (b), (c), (d), (f) | Notification and Recordkeeping |
| § 60.8 | Performance Tests |
| § 60.12 | Circumvention |
| § 60.13 | Monitoring |
| § 60.19 | General Notification and Reporting Requirements |

**New Source Performance Standards – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (40 CFR Part 60 Subpart Db)**

| | |
|---|---|
| § 60.44b(a), 60.44b(l)(1) | Standard for Nitrogen Oxides |
| § 60.45b(a), 60.45b(k) | Compliance and Performance Test Methods and Procedures for Sulfur Dioxide |
| § 60.46b(c), (f) | Compliance and Performance Test Methods and Procedures for Particulate Matter and Nitrogen Oxides |
| § 60.47(a), 60.47b(g) | Emission Monitoring |
| § 60.48b, (b), (c), (d), (e), (f), (g) | Emission Monitoring for Particulate Matter and Nitrogen Oxides |
| § 60.49b(a), (b), (d), (g), (h)(2), (i) | Reporting and Recordkeeping Requirements |

**New Source Performance Standards – Standards of Performance for Stationary Gas Turbines (40 CFR Part 60 Subpart GG)**

| | |
|---|---|
| § 60.332(a) and (b) | Standard for Nitrogen Oxides |
| § 60.333 | Standard for Sulfur Dioxide |
| § 60.334(b) | Monitoring of Operations |
| § 60.335 | Test Methods and Procedures |

## NESHAP Program (40 CFR Part 61)

| **Subpart M National Emission Standard for Asbestos** | |
|---|---|
| § 61.145(a)(2) | Standard for demolition and renovation |
| § 61.145(b)(1), (2), (3)(i) and (3)(iv), (4)(i) through (vii) and (4)(ix) and (4)(xvi) | Notification requirements when demolishment involves less than 80 linear meters on pipes and less than 15 square meters on other services and less than one cubic meter off facility components of regulated asbestos containing material (RACM) where the length or area could not be measured previously or there is no asbestos. |
| § 63.4(b) | Circumvention |

## Accidental Release Program (40 CFR Part 68)

| | |
|---|---|
| § 112(r)(1) | General duty to identify, prevent and minimize the consequences of accidental releases of listed and other extremely hazardous substances. |
| 40 CFR Part 68 | Chemical Accident Prevention Provisions |

## Permits Regulation (40 CFR Part 72)

| **Subpart A provisions** | **Acid Rain Program General Provisions** |
|---|---|
| 72.9(a), (b), (c), (d), (f), (g)4 | Standard Requirements |
| **Subpart B** | **Designated Representative** |
| 72.20 | Authorizations and Responsibilities of the Designated Representative |
| 72.21 | Submissions |
| 72.22 | Alternate Designated Representative |
| 72.23 | Changing the Designated Representative |
| **72.24** | Certificate of Representation |
| **Subpart C** | **Acid Rain Permit Applications** |
| 72.30(a), (b)(2)(ii), (d) | Requirements to Apply |
| **Subpart D** | **Acid Rain Compliance Plan and Compliance Options** |

| | |
|---|---|
| 72.40(a)(1) | General, Compliance Plan with sulfur dioxide emissions |
| **Subpart I** | **Compliance Certification** |
| 72.90 | Annual Compliance Certification Report |
| 72.95 | Allowance Deduction Formula |
| **Appendix A** | **Methodology for Annualization of Emissions Limits** |
| **Appendix B** | **Methodology for Conversion of Emissions Limits** |
| **Appendix D** | **Calculation of Potential Electric Output Capacity** |

**Sulfur Dioxide Allowance System (40 CFR Part 73)**

| | |
|---|---|
| **Subpart B** | **Allowance Allocations** |
| 73.33(a), (c) | Authorized Account Representative |
| **Subpart D** | **Allowance Transfer** |
| 73.50(b) | Scope and Submission of Transfers |

**Continuous Emission Monitoring (40 CFR Part 75)**

| | |
|---|---|
| **Subpart A** | **General** |
| 75.4(b)(2),(c)(2),(i)(2) | Compliance Dates |
| **Subpart B** | **Monitoring Provisions** |
| 75.10 | General Operating Requirements |
| 75.11(d)(2) | Specific Provisions for Monitoring $SO_2$ Emissions |
| 75.12(a),(b),(c) | Specific Provisions for Monitoring $NO_x$ Emissions |
| 75.13(b) | Specific Provisions for Monitoring $CO_2$ Emissions |
| 75.16(b),(e) | Special Provisions for Monitoring Emissions from Common, Bypass, and Multiple Stacks for $SO_2$ Emissions and Heat Input Determinations |
| **Subpart C** | **Operation and Maintenance Requirements** |
| 75.20 | Initial Certification and Recertification Procedures |

| | |
|---|---|
| 75.21 | Quality Assurance and Quality Control Requirements |
| 75.22 | Reference Test Methods |
| 75.24 | Out-of-Control Periods and Adjustments for System Bias |
| **Subpart D** | **Missing Data Substitution Procedures** |
| 75.30 | General Provisions |
| 75.31 | Initial Missing Data Procedures |
| 75.32 | Determination of Monitor Data Availability for Standard Missing Data Procedures |
| 75.33 | Standard Missing Data Procedures for $SO_2$, $NO_x$, and Flow Rate |
| 75.34 | Units with Add-on Emission Controls |
| 75.35 | Missing Data Procedures for $CO_2$ Data |
| 75.36 | Missing Data Procedures for Heat Input Determinations |
| **Subpart E** | **Alternative Monitoring Systems** |
| 75.40 | General Demonstration Requirements |
| 75.41 | Precision Criteria |
| 75.42 | Reliability Criteria |
| 75.43 | Accessibility Criteria |
| 75.44 | Timeliness Criteria |
| 75.45 | Daily Quality Assurance Criteria |
| 75.46 | Missing Data Substitution Criteria |
| 75.47 | Criteria for a Class of Affected Units |
| 75.48 | Petition for an Alternate Monitoring System |
| **Subpart F** | **Recordkeeping Requirements** |
| 75.53(a), (b), (f)(1), (f)(4), (f)(6) | Monitoring Plan |
| 75.57 | General Recordkeeping Provisions |

| | |
|---|---|
| 75.58(b), (c) | General Recordkeeping Provisions for Specific Situations |
| 75.59 | Certification, Quality Assurance, and Quality Control Record Provisions |
| **Subpart G** | **Reporting Requirements** |
| 75.60 | General Provisions |
| 75.61 | Notifications |
| 75.62 | Monitoring Plan Submittals |
| 75.63 | Initial Certification or Recertification Application Submittals |
| 75.64 | Quarterly Reports |
| **Subpart H** | **$NO_x$ Mass Emissions Provisions** |
| **Appendix A** | **Specifications and Test Procedures** |
| **Appendix B** | **Quality Assurance and Quality Control Procedures** |
| **Appendix F** | **Conversion Procedures** |
| **Appendix D** | **Optional $SO_2$ Emissions Data Protocol for Gas-Fired and Oil-Fired Units** |
| **Appendix G** | **Determination of $CO_2$ Procedures** |

**Protection of Stratospheric Ozone (40 CFR Part 82)**

| **Subpart F** | **Recycling and Emissions Reduction** |
|---|---|
| § 82.106 - 82.124 | Labeling Requirements |
| § 82.156 | Required Practices |
| § 82.158 | Standards for Recycling and Recovery Equipment |
| § 82.161 | Technician Certification |
| § 82.166 | Reporting and Recordkeeping Requirements |

| | |
|---|---|
| **Subpart G** | **Significant New Alternatives Policy Program** |

| | |
|---|---|
| § 82.174(b) | Prohibition against use of substitute |
| § 82.174(c) | Prohibition against use of substitute without adhering to use restrictions |
| § 82.174(d) | Prohibition against use of substitute after added to list of unacceptable substitutes |

## Federal Requirements

## Maricopa County State Implementation Plan (as of 6/15/2016)

**Regulation I General Provisions**

| |
|---|
| **Rule 3 - Air Pollution Prohibited 4/12/82** |

**Regulation II Permits**

| |
|---|
| **Rule 27 - Performance Tests 4/12/82** |

**Regulation III Control of Air Contaminants**

| |
|---|
| **Rule 30 - Visible Emissions 4/12/82** |
| **Rule 31 - Emissions of Particulate Matter 4/12/82** |
| §§ A.1,2,3,4,6,7, - Non-Point Sources of Particulate Matter. |
| § H.1.a - Fuel Burning |
| |
| **Rule 32 - Odors and Gaseous Emissions 7/27/72** |
| §§ A, C, D, E, F |
| |
| **Rule 33 – Storage and Handling of Petroleum Products 6/12/82** |
| § 33.3 Loading Into Stationary Storage Containers |
| |
| **Rule 34 – Organic Solvents – Volatile Organic Compounds 5/5/82** |
| § C.1 – Metal cleaning operations |
| § C.2(a) – Cold Organic Solvent Cleaning |
| § E.1 & E.2 – Spray Paint and Other Surface Coating Operations |
| § G – Limits on VOC Discharge from Individual Equipment |
| § K – Limits on Photochemically Reactive Solvent |

| |
|---|
| § L – Cutback Asphalt |
| |
| **Rule 34 – Organic Solvents – Volatile Organic Compounds** |
| § C.1 – Metal cleaning operations |
| § K – Limits on Photochemically Reactive Solvent |
| |
| **Rule 310 – Fugitive Dust Sources 1/27/10** |
| **Rule 312 – Abrasive Blasting 7/13/88** |
| **Rule 314 – Open Outdoor Fires 3/12/09** |
| **Rule 353 – Gasoline in Stationary Dispensing Tanks 4/6/92** |
| |

**Regulation IV Production of Records: Monitoring, Testing and Sampling Facilities**

| |
|---|
| **Rule 40 Recordkeeping and Reporting 4/12/82** |
| **Rule 41** § A **Monitoring 4/12/82** |
| **Rule 42 Testing and Sampling 7/27/72** |
| **Rule 43 Right of Inspection 7/27/72** |